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**US Army Corps  
of Engineers**

New Orleans District

**CULTURAL RESOURCES SERIES**

**Report Number: COELMN/PD-86/03**

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AD-A175 209

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**CULTURAL RESOURCES SURVEY OF THE  
ANGELINA REVETMENT ITEM, ST. JAMES  
PARISH, LOUISIANA.**

**FINAL REPORT**

**October 22, 1986**

**R. Christopher Goodwin and Associates, Inc.  
1306 Burdette Street  
New Orleans, Louisiana 70118**

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**Prepared for  
U.S. Army Corps of Engineers  
New Orleans District  
P.O. Box 60267  
New Orleans, LA 70160-0267**



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Gramercy	Mississippi River	Twentieth Century															
Historic Archeology	Nineteenth Century																
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) R. Christopher Goodwin & Associates, Inc. conducted a cultural resources survey of the Angelina Revetment Item, adjacent to the Mississippi River channel, during August and September, 1985. The area was settled during the Spanish Colonial Period (1763-1803) by Acadian immigrants. During the nineteenth century, several sugar plantations developed in the project area, although farmsteads continued to exist. A lumber yard and the Central Sugar Factory																	

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were established near the project corridor by the end of the 1800s. Eight sites were recorded during archeological survey. Sites 16SJ41, 16SJ43, 16SJ44, 16SJ46, 16SJ47, and 16SJ48 all yielded small collections of habitation refuse dating from the nineteenth and early twentieth centuries. Because feature data, contextual integrity, and significant artifactual remains are lacking, none of these sites were determine to be significant. Site 16SJ42 represents the remains of residential structures for employees of the Lutcher and Moore Company Sawmill. Testing failed to reveal in situ deposits, and extreme water-wear on the artifacts suggested mixing of formerly discrete remains. Therefore, the site was not determined to be significant. Site 16SJ45 yielded a large collection of refuse associated with the former Golden Grove Plantation. Testing failed to reveal evidence of undisturbed cultural deposits; thus the site was not determined to be significant. No additional investigation is recommended for any of these sites.

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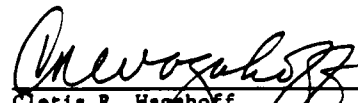
Planning Division  
Environmental Analysis Branch

To The Reader

The following report of survey and site inventory was prepared for the U.S. Army Corps of Engineers, New Orleans District in advance of revetment construction along the Mississippi River in St. James Parish, Louisiana. Eight nineteenth century sites were located adjacent to the river channel. All have been disturbed or redeposited, and have a very low probability for yielding data of scientific value.

The State Historic Preservation Officer concurs that none of these eight sites meets the National Register of Historic Places criteria for significance. Construction of Angelina Revetment within the survey reach will proceed without further investigation.

  
Carroll H. Kleinhaus  
Authorized Representative  
of the Contracting Officer

  
Cletis R. Wasahoff  
Chief, Planning Division

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## CHAPTER I

### INTRODUCTION

This report presents the results of a cultural resources survey of the Angelina Revetment Item, located in St. James Parish, Louisiana. This study was conducted for the U.S. Army Corps of Engineers, New Orleans District, pursuant to Delivery Order No. 001 of Contract DACW29-85-D-0113. The Angelina project area is located on the east (left descending) bank of the Mississippi River between M-146.2-L and M-149.2-L (Figure 1) (see Chapter II, Project Area Description), where revetment construction is planned by the Corps of Engineers. A continuous, articulated concrete mattress will be mechanically laid from the low water line on the bank to a point several hundred feet into the river channel. In preparation, a 200 - 300 ft corridor adjacent to the bankline will be cleared of all vegetation and graded to a standard slope. The survey effort reported here was designed to locate and identify all cultural resources within this impact area, to permit assessment of project impacts on those resources, and to evaluate the significance of sites identified applying National Register of Historic Places criteria.

Archival research focused on historic land use and on historic architectural improvements within the project area. Trajectories of land use and property ownership then were examined in order to develop an interpretive framework for the project area and to provide a documentary context for use in evaluation of significance of recovered remains. Map research included examination of the 1870s and 1921 series Mississippi River Commission Maps, the Caving Banks Maps, levee setback maps, and nineteenth century historical maps.

Field investigations, which initially consisted of an intensive pedestrian survey, were conducted during August and September, 1985. The presence of near surface remains was evaluated using a systematic shovel testing program, conducted simultaneously with the pedestrian survey. A total of eight archeological sites were identified during this phase of research; they were designated Angelina Sites 1-8. These sites since have been assigned State Survey numbers 16 SJ 41 through 16 SJ 48, respectively. All eight sites are located along the bankline or cutbank of the Mississippi River. Additional site testing included surface collection, and a combination of shovel and auger testing. Where appropriate, stratigraphic profiles were cleaned along the cutbank of the river. Fieldwork revealed that most archeological remains at the eight sites were restricted either to the surface or to reworked deposits near the surface. Erosion, wave-washing, and redeposition characterized these sites; all

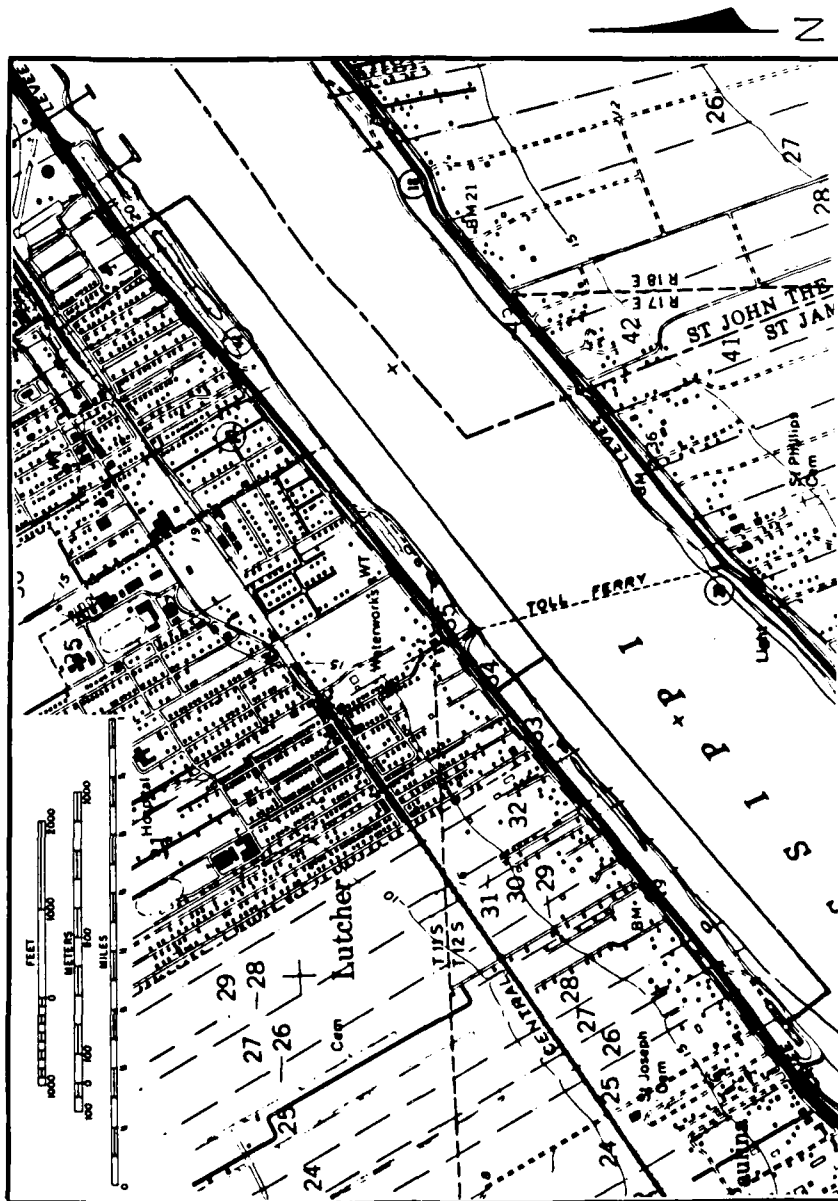


Figure 1. Excerpt from the Litcher 7.5' quadrangle showing the location of the project area.

sites lacked contextual integrity.

Artifacts recovered during fieldwork were washed, catalogued, and classified. Laboratory analysis focused on identification of function and on chronological placement of recovered remains. In addition, laboratory time was devoted to preparing the various collections for permanent curation.

The results of the archival research and archeological field survey are presented below, along with an assessment of project impact based upon these investigations.

## CHAPTER II

### PROJECT AREA DESCRIPTION

#### Location

The Angelina Revetment Item project area is located on the east (left descending) bank of the Mississippi River between M-146.2-L and M-149.2-L in St. James Parish, Louisiana (Figure 1). The project area consists of a segment of batture approximately 2,643 m in length, from Levee Station 4218+21 (Range U-80) to Levee Station 4098+14 (Range U-200), and from the water line of the Mississippi River to the toe of the modern Mississippi River Protection Levee.

Initially, the project area was divided into two segments, from U-80 to U-150 and from U-150 to U-200, corresponding to priority work areas established by the New Orleans District, Corps of Engineers. The intensive archeological survey and site recordation effort conducted at the Angelina Revetment Item proceeded according to this schedule. However, because the two survey areas comprise a contiguous segment of batture, they are treated as a single survey corridor in this report.

#### Natural Setting

The Angelina Revetment project area is located in the Upper Deltaic Plain of the Mississippi River within the modern meander belt, which the river has occupied for approximately the past 4800 years (Saucier 1974:22). Fluvial activity, including lateral migration and overbank deposition during flood stages, is the dominant geologic process operating on the landscape in this region. The formation of natural levees, point bar deposits, and other geomorphic features such as crevasse channels and abandoned river courses, are well-documented (e.g., Smith et al. 1986).

The project area is situated along the river near the present-day town of Lutcher, La. Examination of Pontchartrain Levee District maps (Figures 2) indicates that bankline erosion here has not been so severe as at many other nearby localities. For example, at M-151-L, just upriver from the Angelina Revetment Item, as much as 2000 feet of bankline have been lost to erosion during the last 150 years (Goodwin, Yakubik and Gendel 1983). Figure 2 shows that only 300 feet of bankline have been lost within portions of the Angelina project area between 1874 and 1949. Examination of the 1962 (photorevised 1980) 7.5' Lutcher quadrangle indicates that an additional 150 feet may have been lost since that time.



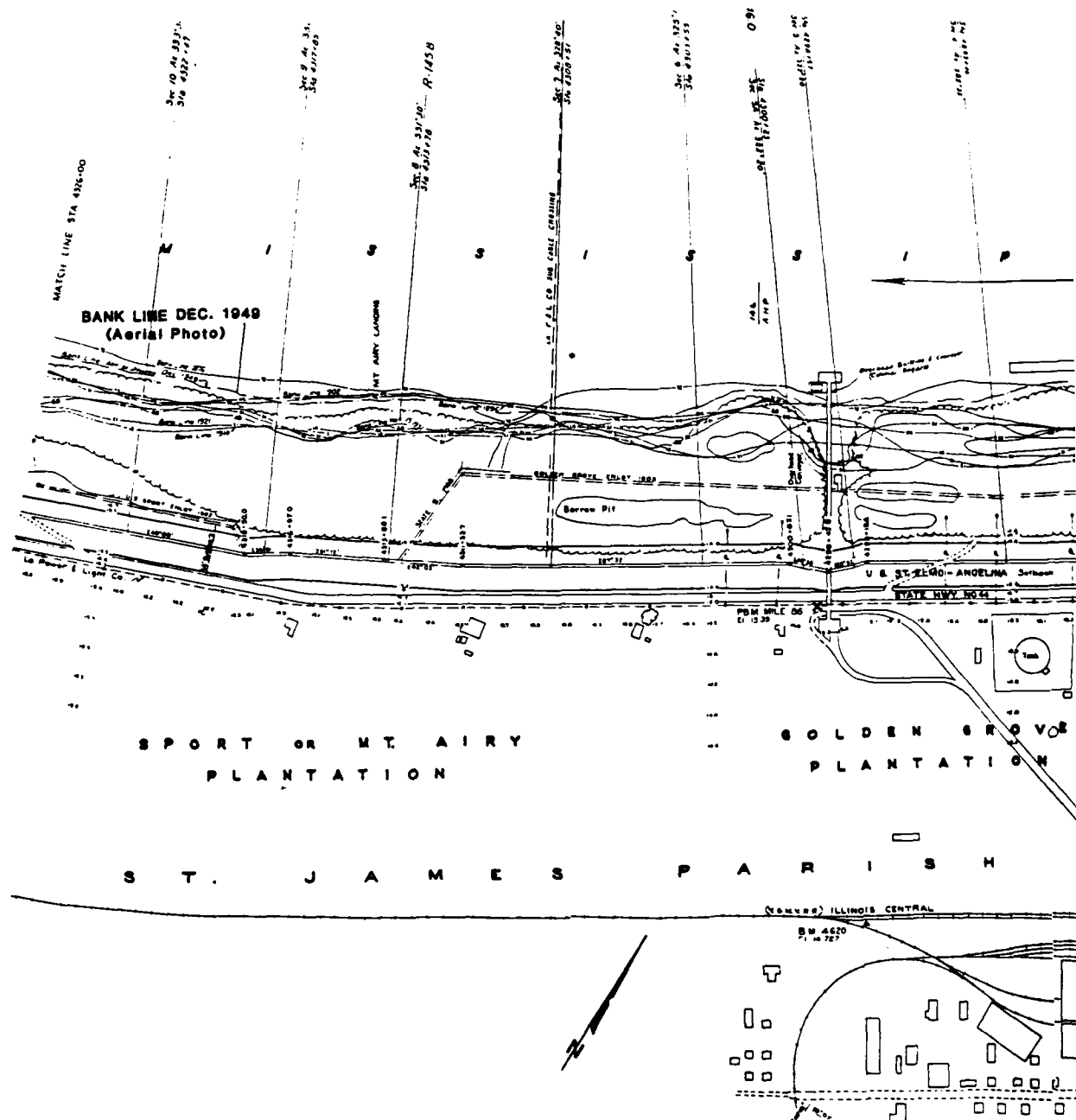


Figure 2. Excerpt from the Pontchartrain Levee District Caving Bank Survey showing bankline changes in the project area.



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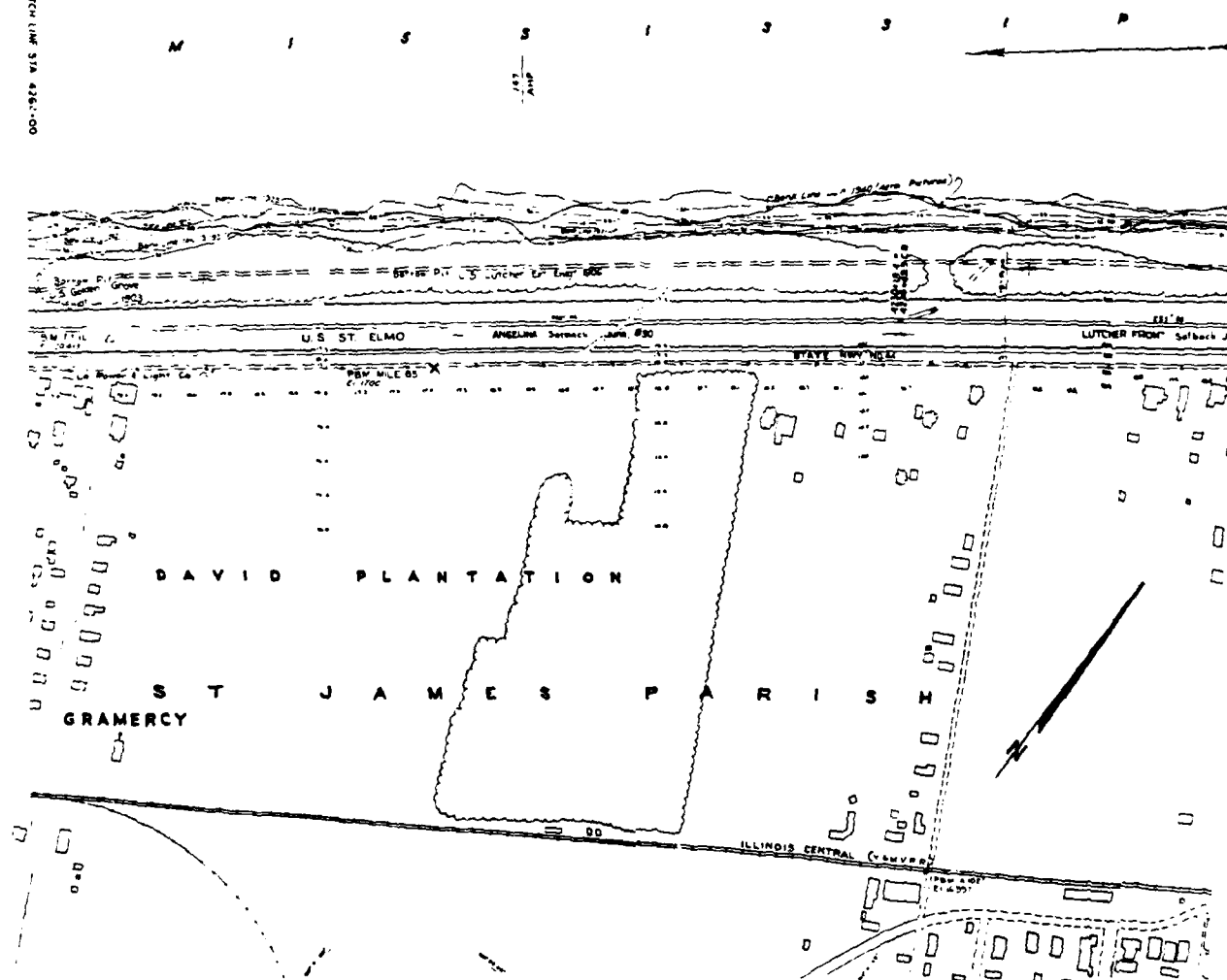
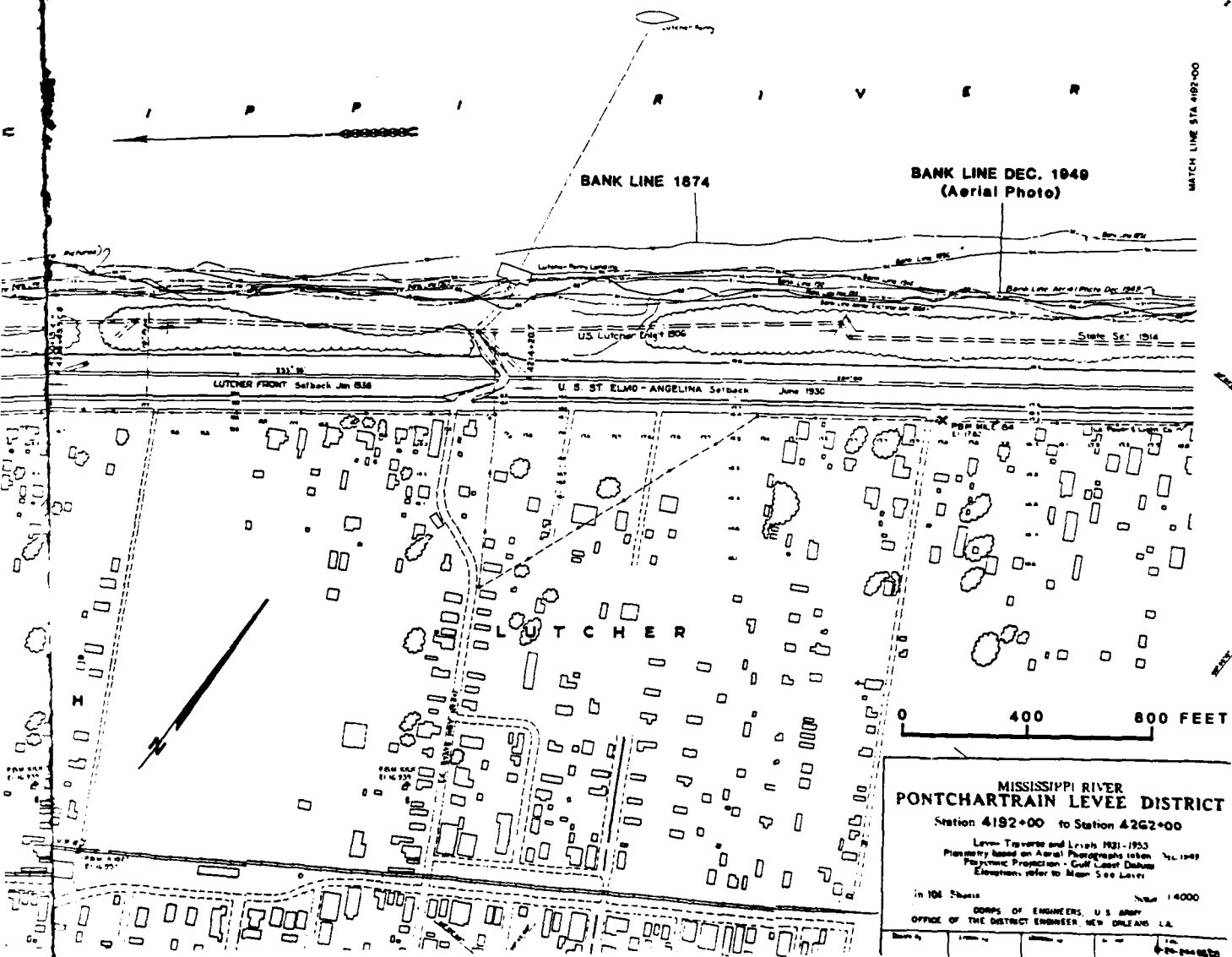


Figure 2, Continued.



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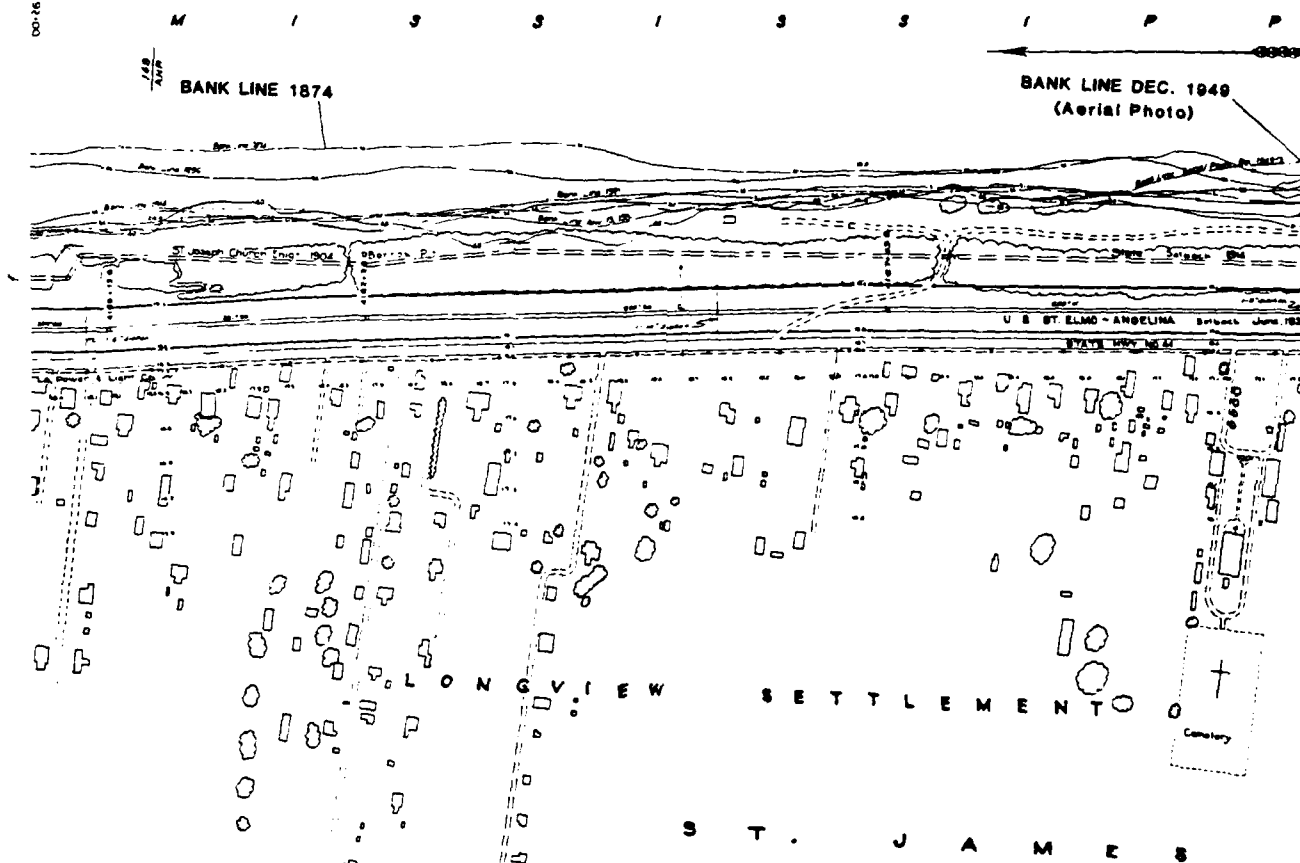
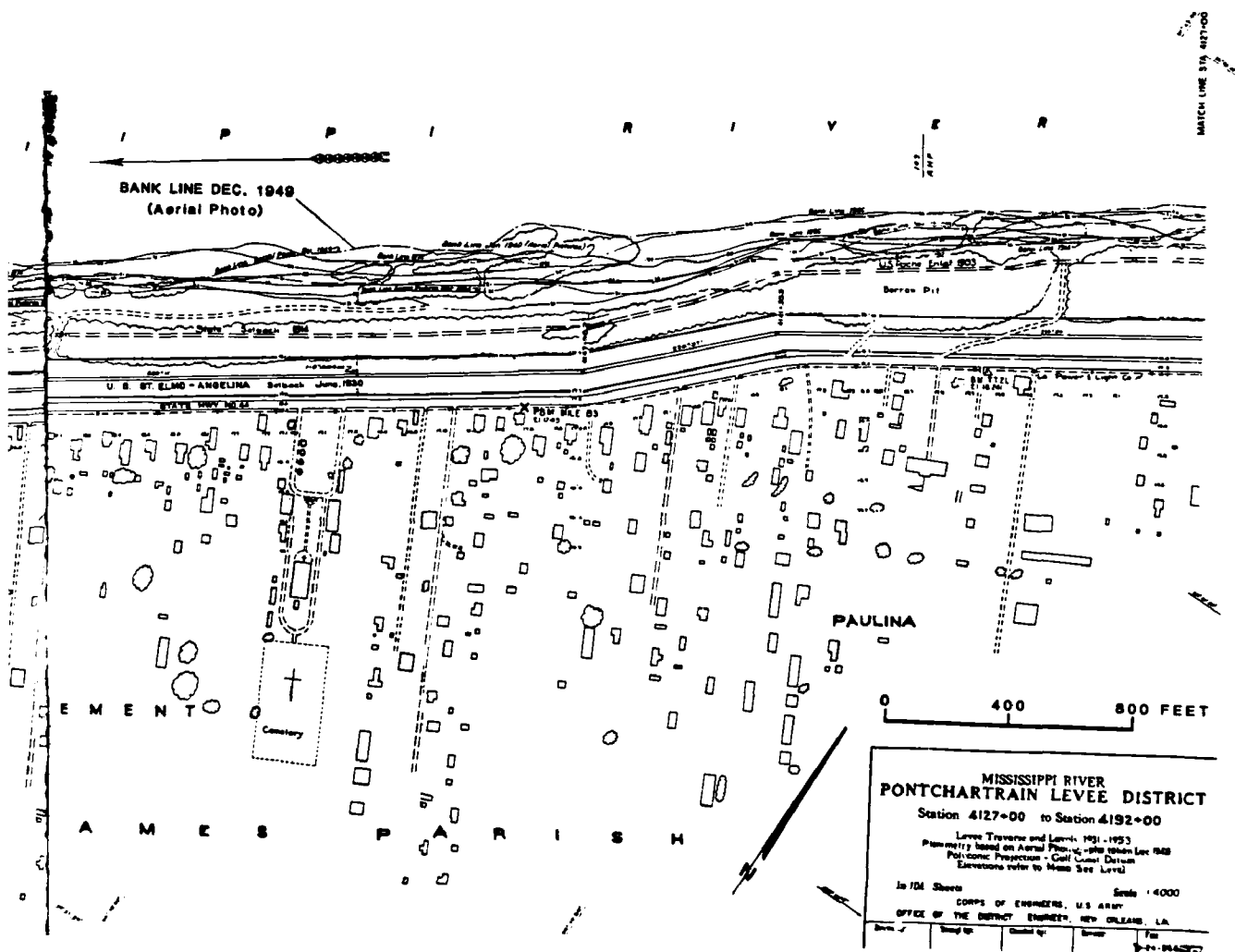


Figure 2, Continued.



Prior to the construction of artificial protection levees, overbank deposition during flood stages created massive wedges of sediment, or natural levees, along corridors parallel to the river channel. In the general region of the project area, natural levees attain widths of up to 5 km. Natural levee deposits are highest near the river channel; they gradually diminish away from the channel toward the backswamp. Human habitation, generally, is concentrated in areas of higher elevation near the riverbank. The construction of artificial levees has altered the natural pattern of deposition and accretion. Most fluvial activity now is concentrated within the batture, or land lying between the river and the modern levee system. The Angelina project area is located entirely within the present day batture.

Loamy and clayey soils characterize the batture and adjacent natural levee deposits. Convent soils and silty alluvial land are characteristic of the batture. These soils frequently are flooded; in times of flood, they are subject to scouring and deposition. They support a vegetation typical of initial stages of ecological succession. Initial willow forest is dominated by black willow (*Salix nigra*) with cottonwood (*Populus deltoides*), sycamore (*Platanus occidentalis*), and hackberry (*Celtis laevigata*) comprising the major overstory vegetation. Sweetgum (*Liquidambar styraciflua*), green ash (*Fraxinus pennsylvanica*), nuttall oak (*Quercus nuttalli*), water oak (*Quercus arkansana*), elm (*Ulmus*), and pecan (*Carya illinoensis*) may occur at higher elevations. Predominant understory vegetation includes poison ivy, grape and trumpet creeper; groundnut, buckwheat vine, and sandvine also may be common locally (Bahr et al. 1983).

During the early historic period, important faunal species included the black bear (*Euarctos americanus*), mountain lion (*Felis concolor*), deer (*Odocoileus virginianus*), cottontail rabbit (*Sylvilagus floridanus*), swamp rabbit (*Slyvilagus aquaticus*), raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), opossum (*Didelphis marsupialis*), gray squirrel (*Sciurus carolinensis*), and fox squirrel (*Sciurus niger*). In addition, several species of birds, reptiles, and fish were common in habitats both within and near the present project area (Shelford 1963; Lowery 1974).

Changes in the landscape caused by natural and artificial agencies during the historic period have implications for the preservation and recovery of archeological remains within the project area. These processes include overbank deposition, lateral migration of the river, and construction of artificial features such as revetments, protection levees, and borrow areas. As will be shown below, these processes have impacted the project area. Locations of cultural remains and condition of cultural

materials and deposits which were identified during this survey  
can be explained largely by these processes.



### CHAPTER III

#### PREVIOUS INVESTIGATIONS

Prior to the survey effort reported here, there were no recorded sites within the Angelina project area. However, a number of sites have been recorded in the immediate vicinity, primarily as a result of previous cultural resources surveys.

R. Christopher Goodwin and Associates, Inc. (Goodwin, Yakubik, and Gendel 1984) conducted test excavations at Bourbon Plantation (16 SJ 35), located in St. James Parish on the East (left descending) bank of the Mississippi River at M-151-L, just upriver from the Angelina project area. Bankline erosion and lateral river migration were severe at this site, and the majority of archeological remains no longer possessed contextual integrity. During 1984, a portion of the Mississippi River batture between M-148.5-R and M-149.5-R, near Vacherie in St. James Parish, was investigated by R. Christopher Goodwin and Associates, Inc. (Goodwin, Yakubik, Stayner, and Jones 1984). A number of intact archeological features were recorded, including stratified and datable cultural refuse deposits, agricultural features (e.g., irrigation flumes), and plank privies. That entire reach has been designated the Vacherie site (16 SJ 40). The bankline in this area was shown to be eroding at an alarming rate, and the site is in imminent danger of loss.

Iroquois Research Institute conducted an intensive cultural resources survey of 14 items along the Mississippi River, north and south of New Orleans in 1982 (Iroquois 1982). Two survey areas were located within the region of the present project area, Belmont Revetment and Rich Bend Revetment. A 1976 survey of Belmont Revetment by Shenkel Sternberg and Troxler did not locate any cultural resources within their project corridor (Shenkel et al. 1976). Within these two alignments, two historic sites were encountered, 16 SJ 32 and 16 SJ 33. Site 16 SJ 32 located in the Rich Bend Revetment alignment, consisted of two low brick structures approximately one meter apart. Associated with the structures was a pile of brick rubble and metal conduit fragments. No artifacts were located. Site 16 SJ 33 also located in Rich Bend Revetment alignment, consists of a 130 square meter brick and cinder scatter. Remains appear to be that of a 20th century structure. Neither site was determined to be eligible for nomination to the National Register of Historic Places.

Coastal Environments, Inc. (Glander et al. 1979) conducted a cultural resources evaluation for a proposed Mississippi River Bridge. Four proposed alignments, located in St. James and St. John the Baptist Parishes, were examined. Archeological survey

and testing were conducted at the Gramercy Recommended Alignment; specific site checks were undertaken at the three remaining alternative alignments. A total of 21 cultural sites were evaluated. One site, the Lutcher and Moore Lumber Co. (16 SJ 13), is located adjacent to the Angelina project area, on the landside of the Mississippi River Protection Levee. A brick sawmill and three cypress houses still exist at the site. As will be shown below, some of the remains recovered during the present survey may be related to 16 SJ 13. A number of other sites were recorded, but not tested, in the vicinity of the Angelina project area. These include the Gaudet House site (16 SJ 22), St. Elmo Plantation (16 SJ 12), Laura Duparc Plantation (16 SJ 8), and Homeplace Plantation (16 SJ 10). The Gaudet House site, located at the intersection of LA Highway 44 and Gaudet Street, in Paulina, Louisiana, was being prepared for relocation at the time the survey was conducted. The Golden Grove site (16 SJ 19) is located immediately downriver from the Angelina project area, on the landside of the Mississippi River Protection Levee. At the time of its discovery, this site consisted of a concentration of brick rubble. It has been suggested that these remains represent the Golden Grove sugar house (Glander et al. 1979).

In sum, most of the sites recorded in the vicinity of the Angelina project area have been identified during the course of cultural resources surveys; they all date from the historic period. Many of these sites have not been adequately tested and evaluated at present. Research on the Mississippi River batture has documented the combined destructive effect of lateral migration of the river and of human activity upon cultural resources. Nevertheless, the potential to recover significant intact resources still exists, as investigations at the Vacherie site (16 SJ 40) recently have demonstrated.

## CHAPTER IV

### PREHISTORIC SETTING

This section provides a summary of prehistoric cultural development in the larger region that contains the survey area. The sequence of prehistoric cultures in the region is described, and some of the most important or diagnostic aspects of each successive prehistoric culture or cultural stage are presented. No prehistoric remains were encountered during the Angelina survey, and few aboriginal sites are known in the immediate vicinity of the project area. The nearest prehistoric manifestations are the little known Laiche site (16 AN 10), and the Late Tchefuncte occupation at the Beaux Mire site reported by Weinstein and Rivet (1978).

The earliest well defined archeological evidence of human habitation in North America is represented by the Paleo-Indian stage. A date range of 10,000 - 6,000 B.C. has been suggested for Paleo-Indian occupation of the Lower Mississippi River alluvial valley (Brain 1971:3). Archeological evidence from the western United States indicates that Paleo-Indians were semi-nomadic big game hunters. The material culture of the Paleo-Indian period is best exemplified by the manufacture of large, thin, bifacially-worked lanceolate projectile points which had a "fluted" or channel flake scar at their base. Fluted point complexes include the Llano, Clovis, Folsom, and Plano traditions.

The following Archaic stage reflects cultural adaptations to climatological change occurring after the retreat of the last Pleistocene glaciation (approximately 8,000 B.C.). Critical environmental changes influencing human adaptation during the Archaic period have been summarized by Bryant et al. (1982:21-22) as follows:

1. The extinction, without replacement, of much of the Pleistocene megafauna, including the elephant, horse, and camel, and most of the Bison species on which the Lithic stage economy had been largely based.
2. Certain fluctuations in rainfall and temperature as yet only partly understood but presumed to relate to worldwide climatic changes and to be generally correlated with glacial retreat and oscillations.
3. The plant and animal recolonization of the areas of North America which were previously

glaciated, and establishment of the modern geographical position of the major North American lifezones.

4. The changing volume and gradient of river systems draining eastern North America generated by worldwide deglaciation and rising sea levels.

Archaic cultural complexes are represented by localized stone tool traditions which are thought to represent regional adaptations to local environmental conditions (Bryant et al. 1982:22). Projectile point types found in early Archaic sites include San Patrice, Meserve and Dalton. A shift towards exploitation of smaller and more varied game occurred, along with an increase in gathering of plants and previously ignored animal species, such as shellfish. Archaic subsistence patterns became increasingly more efficient with technological advances which included ground stone tools, such as adzes and metates, and the use of the atlatl (spear thrower). Common point types for the Middle Archaic are Big Sandy, Keithville, Yarbrough, Evans, and Carrollton. A gradual settlement pattern shift from semi-nomadic to seasonal site occupancy to semi-permanent settlement is evidenced during the Archaic. However, in Louisiana, no intact archeological remains firmly associated with the Archaic period have been systematically investigated (Neuman 1984).

The appearance of earthwork and burial mound construction in the late Archaic marked the development of the Poverty Point culture in Louisiana, circa 1500 B.C. Considered to be either an Archaic-Formative transition or an Archaic climax phenomenon, the Poverty Point site, located in West Carroll Parish, is unique in North American prehistory. Although small quantities of fiber-tempered pottery are present at the Poverty Point site, some scholars argue that the culture was aceramic. Nevertheless, crude pottery figurines and irregular-shaped fired clay objects, possibly used in "stone boiling" cooking techniques, occur in Poverty Point contexts (Bryant et al. 1982:23). Poverty Point material culture also is represented by fine stone lapidary work, steatite or soapstone vessels, and by a microlithic tool industry. Subsistence apparently was based on intensive hunting and gathering, although prior emphasis on protein capture may reflect bias in archeological study of the Poverty Point period. Projectile point types originating in the Late Archaic and continuing into the Poverty Point period are Gary, Ellis, Pontchartrain, Kent, Carrollton, and Marshall, and larger forms such as Hale.

The next stage in the chronological sequence for the region is called the Neo-Indian era. The appearance of pottery and arrow

points in the archeological record is generally used to mark the beginning of this era. Changes in settlement patterns from semi-permanent to permanent villages, and the introduction of agriculture, characterize Post-Archaic periods. The most frequently applied regional chronology of the Neo-Indian era in South Louisiana includes the following periods.

The first of these periods is the Tchula or Tchefuncte, which has been dated from ca. 500 B.C. to A.D. 200 (Neuman 1984:113-136). During the Tchefuncte period, pottery became important in prehistoric Louisiana, and increasing amounts of pottery with rocker stamped decoration and with tetrapodal supports were made. The soft Tchefuncte pottery had poorly compacted paste, and common vessel forms included bowls and cylindrical and shouldered jars. Decoration also included fingernail and tool punctation, incision, simple stamping, drag and jab, parallel and zoned banding, and stippled triangles. Tchefuncte pottery apparently derived from and was genetically related to earlier ceramic complexes at Stallings Island, Georgia, Orange in North Florida, and to the Poverty Point culture. Ford (1969:193) speculated that commonalities in ceramics across the Gulf South states during this period reflect the breakdown of ethnic barriers due to the powerful influence of the arrival of maize (corn) agriculture. Gibson (1978) argues strongly against the presence of maize in the Lower Atchafalaya prehistoric sequence, leaving the reasons for the diffusion of Tchefuncte into this area unexplained.

The Tchefuncte artifact assemblage includes boatstones, grooved plummets, mortars, sandstone saws, barweights, scrapers, and chipped celts. Socketed antler points, bone awls and fish hooks, and bone ornaments also have been found. Projectile point types found in Tchefuncte contexts are Gary, Ellis, Delhi, Motley, Pontchartrain, Macon and Epps. The population of the Tchefuncte period appears to have been a melange of long-headed Archaic peoples with a new subpopulation of broad-headed people who practiced cranial deformation, and who are thought to have entered the southeast from Mexico. The presence of rocker stamped pottery, burial mounds, and of some other individual traits (viz. Shenkel 1984:64-65), also shows similarities to the Hopewellian development (500 B.C. to A.D. 300).

The subsequent Marksville period (100 B.C. - 300 A.D.) to a large degree is a localized hybrid manifestation of the Hopewellian culture climax that preceded it in the Midwest. The type site is located at Marksville, Louisiana. Elsewhere in the state, smaller sites occur which display both Marksville pottery types and a modified form of the Marksville mortuary complex. Marksville houses appear to have been circular, fairly permanent, and possibly earth covered. The economic base of the Marksville culture seems to be a further modification of the Poverty Point -

Tchefuncte continuum, albeit prior emphasis on the importance of hunting, fishing, and gathering aspects of subsistence in relation to agriculture may have been overstated. A fairly high level of social organization is indicated by the construction of geometric earthworks and of burial mounds for the elite, as well as by a unique mortuary ritual system. Although large quantities of burial furniture are not recovered from Marksville sites, some items, particularly elaborately decorated ceramics, were manufactured especially for inclusion in burials.

Marksville ceramics were well-made, with decorations that included u-stamped incised lines, zoned dentate stamping, zoned rocker stamping (both plain and dentate), the raptorial bird motif, and, flower-like designs (Toth 1977; Phillips 1970). The cross-hatched rim is particularly characteristic of Marksville pottery, and may relate this complex to other early cultural climaxes in the Circum-Caribbean area. Plain utilitarian wares also were produced. Perforated pearl beads, bracelets, and celts have been recovered from Marksville contexts.

The next cultural period identified for south Louisiana is the Troyville or Baytown phase (A.D. 300-700). This transitional period followed the decline of the Hopewellian Marksville culture; it is poorly understood. Except for the type site at Jonesville, knowledge of the Troyville culture is based on the discovery of Troyville ceramics in other sites. Among the pottery types clustering in the Troyville period are: Mulberry Creek Cord Marked, Marksville Incised (Yokena), Churupa Punctated, Troyville Stamped, Larto Red Filmed, Landon Red-on Buff, and Woodville Red Filmed. However, these pottery types and most other traits are not confined solely to this period. Troyville is thought to represent the period when maize agriculture and the bow and arrow were adopted. Evidence for agriculture includes shell hoes and grinding stones (Neuman 1984).

The subsequent Coles Creek period (A.D. 700 - 1100) developed out of Troyville (Brown 1984). Coles Creek was a dynamic and widespread manifestation throughout the lower Mississippi Valley. Coles Creek may be viewed as the local early or pre-classic variant of the Mississippian tradition, and its emphasis on temple mound and plaza construction again suggests Mesoamerican influence. Population growth and a real expansion were made possible by increasing reliance on productive maize agriculture. The seasonal exploitation of coastal areas supplemented the maize economy of large inland sites, and small non-mound farmsteads were present. A stratified social organization with a dominant priestly social class continued. The construction of platform mounds became important during this period. These were intended primarily as bases for temples or other buildings, but some also contained burials. Rounded smaller mounds still were present. A

common motif of Coles Creek ceramics is a series of incised lines parallel to the rim. Pottery types include: Coles Creek Incised, Pontchartrain Check Stamped, and Mazique Incised.

In the southern part of the lower Mississippi Valley, the Plaquemine culture developed out of a Coles Creek background. Ceremonial sites of this period consisted of several mounds arranged about a plaza area. Associated small sites were dispersed about such centers. Social organization and maize agriculture were highly developed. The most widespread decorated ceramic type of the Plaquemine period was Plaquemine Brushed. Other types include Harrison Bayou Incised, Hardy Incised, L'Eau Noir Incised, Manchac Incised, Mazique Incised, Leland Incised, and Evansville Punctate. Both decorated types and plain wares, such as Anna Burnished Plain and Addis Plain, were well made. Diagnostic Plaquemine projectile points are small and stemmed with incurved sides.

Late in the prehistoric period, the indigenous Plaquemine culture came under the influence of Mississippian cultures from the Middle Mississippi River Valley. Mississippian culture was characterized by large mound groups, a widespread distribution of sites, and by shell tempered pottery. A distinctive mortuary cult or complex, called "Southern Cult," that made use of copper, stone, shell, and mica was introduced, and elaborate ceremonialism reflected in animal motifs and deities pervaded Mississippian culture. Trade networks were well established during this period; raw materials and specialty objects were traded across large areas of the central and southern United States.

Historically, the Houma Indians occupied areas along the Mississippi River in the vicinity of the project area (Giardino 1984). The Houma initially were encountered by LaSalle and Tonti in 1682-85 near the Red River, north of Baton Rouge. Under pressure from the Tunica, the Houma left the area, and in 1790 they were located in the region between Donaldsonville and Union, Louisiana. In 1718, they occupied three villages between Burnside and Covent, Louisiana. Until 1766, the Houma occupied the region between Burnside and Darrow, following which the tribe moved toward Terrebonne Parish.

## CHAPTER V

### HISTORIC OVERVIEW

#### Acadian Settlement in St. James Parish

The first French concession in the area of St. James Parish was granted to the French Duke de Charost and his son, the Marquis d'Anceny. Their concession was located near the present day towns of Gramercy and Mt. Airy within St. James Parish. It originally was settled in 1720 by about 100 persons under the direction of Sieur de L'Epinet. Two years later, following destruction of its stores and supplies by fire, it was abandoned (Bourgeois 1957:6)

Only intermittent settlement occurred within the St. James Parish for the next forty years, possibly due to the presence of unfriendly Indian tribes such as the Houma and the Chitimacha (Bourgeois 1957:7). A few isolated plantations were established in the area. A land claim filed with the United States government in 1812 by Mathias Frederic's heirs states that six arpents near the present day town of Vacherie were cultivated as early as 1756 (Lowrie and Franklin 1834:266). Another parcel claimed by Frederic's heirs was granted as a twenty arpent concession in 1755 to Andrew Neau (Lowrie and Franklin 1834:385). It is not known whether these were residential plantations. Jaques Cantrelle held a plantation in St. James prior to 1763, but he did not reside there until after 1769 (Voorhies 1973:201,441). This plantation, which was located on the west bank of the river opposite present day Convent, was called "Cabahonnocer", a phonetic spelling of the Choctaw word for "Mallard's roost."

Three brothers named Mouton were the first Acadian settlers within present day St. James Parish. They settled on the west bank near Vacherie in 1756. Over 650 Acadian refugees arrived in Louisiana in 1765; the first group of 200 immigrated via Ste. Domingue (Haiti) (Rushton 1979:319). Pittman, writing ca. 1770, discussed the nature of and reasons for the Acadian settlement of Louisiana:

The new settlements of the Acadians are on both sides of the river, and reach from the Germans to within seven or eight miles of the river Ibbeville (sic). These are the remainder of the families which were sent by General Lawrence from Nova Scotia to our southern provinces; where by their industry, they did and might have continued to live very happy, but that they could not publicly enjoy the Roman Catholic religion, to which they are greatly bigoted. They took



the earliest opportunity, after the peace, of transporting themselves to St. Domingo where the climate disagreed with them so much, that they in a few months lost near half their numbers; the remainder, few only excepted, were in the latter end of the year 1763, removed to New Orleans, at the expense of the King of France (Pittman 1906:60-61).

The river "Ibbeville" (sic) is known today as Bayou Manchac. Initial Acadian settlement encompassed the lower portion of Iberville Parish as well as St. James and Ascension.

In 1766, a group of 216 Acadians moved to Louisiana directly from Halifax, Nova Scotia. Their settlement in the St. James area was known as "la premier cote des Acadiens" (the first Acadian coast); the settlement in the Ascension Parish area was called "la deuxieme cote des Acadiens" (the second Acadian coast) (Arsenault 1966:202). By 1770, the former area extended for 16 miles on both banks of the river; its center was on the east bank, approximately opposite College Point. The area became known as "Cabahannocer," the name of Jacques Cantrelle's plantation; later the name was applied to both the Acadian coasts (Marchand 1931:20). The anglicized name in current usage is "Cabanocyte."

The "Census of Cabaanocyte" (sic) shows that in 1766 there were 265 white inhabitants, 98 of whom were males over the age of 15, and 16 slaves. They had 95 hogs, 15 sheep, and 97 guns. The census listed only a few large parcels of fallow land; these were owned by Landry, Bigeou dit Violette, Ducros, Populus, Jaques Cantrelle, and Cantrelle's son-in-law, Louis Judice. Most parcels were small, with three to six arpents front. The "List of Acadians at Cabahannocce" (sic) demonstrates that by 1769 the settlement had grown considerably. There now were 501 white settlers, 163 of whom were men bearing arms, and 36 slaves. They owned 1,867 hogs, 512 head of cattle, and 16 sheep. Most land holdings remained small, with fewer than six arpents river frontage.

Berguin-Duvallon, whose descriptions of Louisiana's inhabitants generally were unflattering, wrote of a visit to the area in 1802:

The Acadians are descendants of French colonists, transported from the province of Nova Scotia. The character of their fore-fathers is strongly marked in them; they are rude and sluggish, without ambition, living miserably on their sorry plantations where they cultivate Indian corn, raise pigs, and get children. Around their houses one sees nothing but hogs,

and before their doors great rustic boys, and big strapping girls, stiff as bars of iron, gaping for want of thought, or something to do, at the stranger who is passing (Davis 1806:77-78).

Paul Allard, who also wrote during the first decade of the nineteenth century, was more positive:

As the traveler leaves New Orleans by the gate St. Louis, to ascend the river...he finds...that parish of Cantrelle... Each of those four communities (the parishes of Clesets Rouges, Cote des Allemands, Bonnet Carre, and Cantrelle) has a priest and a commandant. They are very well populated. Their inhabitants are very industrious, very sober, and very economical. Few of them are married. Almost all of them live with their slaves or with women of color. They cultivate their fields excellently. They raise sugar, indigo, cotton, rice, maize, and many vegetables. The potatoes which they take from the earth are very good. The melons gathered by them are fine, and have an excellent taste and exquisite perfume. Their kitchen gardens are full of fruit trees, the fruit of which they gather from the month of July. They do not keep their fruit more than three months, and the fruits are not very good to the taste. The oranges which they gather are delicious. Their barnyards are full of hogs, cattle, and fowls of all kinds. If those inhabitants had more hands at their disposal, they would become rich in a very short period of time (Robertson 1911:111).

Similarly, C. C. Robin, writing in 1807, was favorably impressed:

Twenty leagues above the city the Acadian coast begins and runs about another twenty up from there. Like the Germans they work their own farms. Only a few of them have Negroes. Already the population has risen so that the farms are subdivided into strips of two or three arpents frontage. You must remember that each plot ran back forty arpents from the river. Only about half of that depth, however, is under cultivation, the rest being inundated and covered with cypress and similar swamp vegetation. Rice, corn, several kinds of beans, melon (in season), pumpkin, salted pork and beef make up their principal diet. Their

customs can be compared to those of our farmers of Beauce and Brie. Good fellows! They do not show the zeal in their work that their European confreres would, for on the one hand, they are not pressed by necessity, and on the other hand, the lack of outlets for their products discourages them from quarter efforts. However, they are still Frenchmen, passionately loving their country, proud to work for it, and showing a great predilection for its products (Landry 1966:114-115).

#### The Louisiana Purchase and Antebellum Economic Development

In the 1790s and the early 1800s, Louisiana's economy underwent major changes. For a number of reasons, indigo, which had been Louisiana's primary cash crop, could no longer compete on the world market. Indigo produced in India was cheaper. Insect blights and inclement weather caused severe crop losses, and indigo exhausted the soil. An increase in the price of slaves made it difficult to obtain necessary labor for indigo production. The terrible smell of indigo production attracted disease-carrying insects and polluted the streams between Pointe Coupee and the Yazoo River (Holmes 1967:346-348). Other factors in the changing economy were the invention of the cotton gin and the development of a commercial process for extracting sugar from immature cane. Cotton and sugar cane cultivation rapidly became more profitable than cultivation of indigo.

Although the best areas for cotton cultivation were along the river north of Baton Rouge and in the Attakapas and Opelousas districts, cotton was grown as far south as St. James Parish in the early nineteenth century. Berquin-Duvallon describes the area at this time:

Above this begins the parish of Cabahanose, or first Acadian settlement, extending eight leagues on the river. Adjoining it and still ascending is the second Acadian settlement, or parish of the Fourche, which extends about six leagues... Except on the point just below the Iberville [Bayou Manchac], the country from New Orleans is settled the whole way along the river, and presents a scene of uninterrupted plantations in sight of each other, whose fronts are all cleared to the Mississippi, and occupy on that river from five to twenty-five acres with a depth of forty; so that a plantation of five acres in front contains two hundred.

A few sugar plantations are formed in the parish of Cabahanose, but the remainder is devoted to cotton and provisions, and the whole is an excellent soil incapable of being exhausted. The plantations are but one deep on the island of New Orleans, and on the opposite side of the river as far as the mouth of the Iberville, which is thirty-five leagues above New Orleans (Davis 1806:167-168, sic throughout).

The average yield of a superficial arpent of land was approximately 400 pounds of cotton, worth about \$100.00 during the early nineteenth century. One skilled slave (or farmer) could cultivate three arpents of land planted with cotton (Robertson 1911:155). Estimates of the average amount of raw cotton picked per day by a single slave range from 20 (Robertson 1911:156) to 150 (Taylor 1976:67). Cultivation of cotton is discussed in detail by Goodwin, Gendel and Yakubik (1983c) and by Goodwin, Yakubik and Gendel (1983).

Geopolitical changes in the early 1800s influenced economic developments within the area. In 1800, Spain ceded Louisiana to France in the secret Treaty of San Ildefonso. France sold the colony to the United States in 1803. In 1804 the U. S. Congress created a territorial government, and the first governor, William C. C. Claiborne, divided the Territory of New Orleans into twelve counties, including that of Acadian (both Ascension and St. James), in 1805. The new administrative system was unpopular; in 1807 the Legislature made nineteen parishes, including St. James Parish, the basis for local government (Brasseaux et al. 1977:11-12).

Acquisition of the Louisiana Territory stimulated American immigration into the region. Opportunities offered by the growing sugar and cotton industries attracted new settlers. Because substantial outlays were required for sugar mills, cotton gins, levees, and slaves, small planters increasingly sold their holdings to large plantation owners or to wealthy speculators (White 1944:352).

Sugar production rapidly outdistanced that of cotton early in the nineteenth century in St. James Parish. Berguin-Duvallon enumerated the reasons for this:

The sugar cane may be cultivated between the river Iberville and New Orleans, on both sides of the Mississippi, and as far back as the swamps... Above the Iberville the cane would be affected by the cold, and its produce would, therefore, be uncertain. Within these limits, the best

planters admit that one quarter of the cultivated lands of any considerable plantation may be planted in cane, one quarter left in pasture, and the remaining half employed for provisions, etc. and a reserve for a change of crops. One Parisian arpent of one hundred and eighty feet square, may be expected to produce, on an average, twelve hundred weight of sugar, and fifty gallons of rum (Davis 1806:168-169; sic throughout).

Increasing numbers of small farms were sold and consolidated into larger plantations as a result of the shift to sugar cane cultivation. Greater capital investments were necessary for cane cultivation than for cotton (Schmitz 1977:108). Total investment in a sugar plantation could exceed \$200,000.00 (Taylor 1976:65); therefore, cane cultivation was impractical for small farmers. Economic practices related to the sugar industry are detailed elsewhere (Goodwin, Yakubik, Selby et al. 1985; Goodwin, Yakubik and Gendel 1983; Goodwin, Yakubik, Stayner and Jones 1984).

#### Plantation Development During the Antebellum Period

Despite consolidation of landholdings within the project area, most plantations which developed remained small. By 1844, there were five sugar-producing plantations within the present study area, all of which had steam powered mills (Table 1). Table 1 also documents four other plantations within the region but outside the project corridor (see section on Sugar Production in the Vicinity of the Project Area During the Postbellum Period of this report). Golden Grove Plantation, located at the downriver end of the project area (Figure 3), was the largest. The partnership of Shepherd and Hook maintained ownership during the antebellum and early postbellum periods (Table 2). By 1849, Golden Grove boasted two sugar houses (Champomier 1850). Yearly sugar production fluctuated from 210 to 1,002 hogsheads; the yearly average for the antebellum period was 543 hogsheads (Table 2).

Other plantations within the project area were considerably smaller than Golden Grove. David, the neighboring plantation upriver, was owned by the Gervais Gaienne family during the antebellum period (Table 3, Figure 3). Above David was Regina Plantation, composed of two smaller holdings owned by the Reines and the Sexchnaidres (Table 4, Figure 3). Dr. Alexander Humphrey's Plantation, Longview, was adjacent to the Sexchnaidre's land (Table 5, Figure 3); it was named for a long, straight stretch of the nearby river which had been referred to as "La Longue Vue" as early as 1785 (Bourgeois 1957:73). Finally, at

Table 1. Planters with Sugar Houses in the Vicinity of Paulina, Litcher and Gramercy  
(Championier 1844-1862; L. Bouchereau 1868-1877; A. Bouchereau 1878-1914).

<u>Owner/Manager</u>	<u>Plantation Name</u>	<u>Sugar House and Apparatus</u>	<u>Average Sugar Production</u>	<u>Years Listed</u>
Timon Bourgeois				
F. Sexchnaïdre (1858-1862) Brignac (1870-1916)		Wood sugar house; steam and kettle apparatuses	75 hhds.	1868-1871
Mrs. A. Schexnaïdre (1859-1870) Timon Bourgeois (1871-1885) Laiche et al. (1889-1916)	St. Joseph	Wood sugar house; horse powered mill (until 1861), steam and kettle apparatuses (after 1870)	49 hhds.	1858-1916
Joseph Poche & Co.	Mayflower	Wood sugar house; steam and kettle apparatuses	145 hhds.	1859-1916
Scannel & Lafaye (1884) Jos. Poche & Co. (1885)	Lowther	Wood sugar house; steam and kettle apparatuses (until 1893); steam tram and open pan apparatuses (after 1893)	82 hhds.	1883-1916
		Wood sugar house; steam and kettle apparatuses	41 hhds.	1884-1885

Table 1, continued.

Raphael Bauvais

Laiche (1844-1877)  
Clement Ory & Co.  
(1878-1889)

Poche  
Widow P. Poche  
(viz. Table 5)

Longview

(viz. Table 4)

Regina

(viz. Table 3)

David

A & F Montz

Brick and shingle sugar house (1870-1); wood sugar house (after 1872); steam and kettle apparatuses	73 hhd.	1869-1884
Wood sugar house; steam and kettle apparatuses	59 hhd.	1844-1889
Horse powered mill (destroyed in 1875)	81 hhd.	1850-1888
Brick sugar house (burned in 1873); Wood sugar house (after 1882); steam and kettle apparatuses	88 hhd.	1844-1897
Wood sugar house; steam and kettle apparatuses	122 hhd.	1844-1916
Brick sugar house; steam and kettle apparatuses; steam tram, vacuum and centrifuge apparatuses (after 1881)	380 hhd.	1844-1916
Wood sugar house; steam and kettle apparatuses	35 hhd.	1877

Table 1, continued.

Raphael Bultran (1878-1879) Adam Parent (1880-1883) Isidore (1884-1916)	Red Hot	Wood sugar house; steam and kettle apparatuses	93 hhd's.	1878-1916
The Gramercy Co. Ltd. (1896-1902) Colonial Sugar Co. (1903-1916)	Central Factory	Brick sugar house (1896); wood sugar house (after 1898); steam tram, vacuum and centrifuge; apparatuses; triple effects vacuum and centrifuge apparatuses	(viz. Table 9)	1896-1916
(viz. Table 2)	Golden Grove	2 sugar houses during the antebellum period; steam and kettle apparatuses; steam tram, vacuum, and centrifuge apparatuses (after 1893)	429 hhd's.	1844-1916



**Table 2. Sugar Production at Golden Grove Plantation**  
 (Championier 1844-1862; L. Bouchereau 1868-1877;  
 A. Bouchereau 1869-1914).

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>	<u>Rice in Bbls</u>
1844	Moses Shepard	808	
1845	Shepard & M & F Hook	562	
1849 <sup>1</sup>	"	500	
1850	"	398	
1851 <sup>2</sup>	C. M. Shepherd & Hook	398	
1852	"	865	
1853	"	1,002	
1854	"	775	
1855	"	210	
1856	"	215	
1857 <sup>3</sup>	"	268	
1858	"	625	
1859	"	300	
1860	"	325	
1861	"	890	
1868 <sup>4</sup>	Joseph Deynoodt	328	
1869 <sup>5</sup>	"	485	
1870	"	386	
1871	Shepherd & Hooke	86	
1872	"	170	
1873	"	140	
1874	"	178	214
1875	"	173	
1876	Shepherd & Hooke Adam Parent & Co.	198 ----	2,173
1877			
1878	Shepherd & Hooke and Adam Parent & Co.	400	
1879	"	395	
1880	August Servel and Gabriel Dupuy & Co.	275	869
1881	"	285	798
1882	August Servel	475	
1883	"	196	1,200
1884	"	450	
1885	"	500	
1886	"	300	8,000
1887	"	815	7,700
1888 <sup>6</sup>	August Servel and his tenants	530	4,000
1889	August Servel	382	
1890 <sup>6</sup>	"	153,631 lbs.	
1893 <sup>7</sup>	"	1,163,331 lbs.	
1894	"	----	
1895	"	----	
1896	"	----	

Table 2. (continued)

1897	The Gramercy Co. Ltd.	----
1898	Felicien Waguespack	----

- <sup>1</sup>Two sugar houses
- <sup>2</sup>Steam powered mill
- <sup>3</sup>Steam and pneumatic battery apparatuses
- <sup>4</sup>Brick and shingle sugar houses; steam and kettle apparatuses
- <sup>5</sup>One sugar house burnt
- <sup>6</sup>The sugar house was listed as being made out of wood in 1888 and 1890.
- <sup>7</sup>Steam tram, vacuum pan, and centrifuge apparatuses

Table 3. Sugar Production at David Plantation  
(Champomier 1844-1862; L. Bouchereau 1868-1877;  
A. Bouchereau 1878-1914).

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>	<u>Rice in Bbls</u>
1844	Gervais Gaienne	228	
1845	"	185	
1849	"	200	
1850	"	108	
1851 <sup>1</sup>	"	103	
1852	"	160	
1853	Gervais Gaienne & Son	260	
1854	Mrs. Gervais Gaienne & Co.	230	
1855	"	132	
1856	"	47	
1857	"	173	
1858	"	270	
1859	"	53	
1860	"	85	
1861	"	275	
1868	Wildesen & De Porter	71	
1869 <sup>2</sup>	"	144	12
1870	"	195	
1871	"	147	
1872 <sup>3,4</sup>	"	123	
1873 <sup>3</sup>	"	90	
1874 <sup>3</sup>	H & J Wildesen	191	
1875 <sup>3</sup>	"	203	
1876 <sup>3</sup>	"	177	
1877	"	140	
1878	"	99	
1879	"	83	
1880	H. Wildesen	235	
1881	Wildesen & McCan	N.Y.	
1882 <sup>5</sup>	"	543	
1883	"	625	
1884	"	497	
1885	C. P. McCan	522	
1886	Estate of C. P. McCan	503	
1887	"	690	
1888	"	634	
1889	"	278	
1890	M. F. Thompson	1,216,251 lbs.	
1893	"	1,498,918 lbs.	
1894	"	2,467,432 lbs.	
1895	"	1,050,000 lbs.	
1897	The Gramercy Co., Ltd.	----	
1898 <sup>6</sup>	Gramercy Sugar Refining Co., Ltd.	----	

Table 3, continued.

<sup>1</sup>Steam powered mill

<sup>2</sup>Brick and shingle sugar house; steam and kettle apparatuses

<sup>3</sup>The plantation was listed as "Georgiana"

<sup>4</sup>Steam tram and open pan apparatuses

<sup>5</sup>Brick and slate sugar house, steam tram, vacuum and  
centrifuge apparatuses

<sup>6</sup>The plantation continued to be listed under the ownership of  
the Gramercy Co. until 1916, but no crops were reported.

**Table 4. Sugar Production at Regina Plantation**  
 (Champomier 1844-1862; L. Bouchereau 1868-1877;  
 A. Bouchereau 1878-1914).

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>	<u>Rice in Bbls</u>
1844	F. Reine	134	
1845	A. & F. Reine & A. Sexchnaidre	143	
1849	"	184	
1850 <sup>1</sup>	"	112	
1851	F. Reine & A. Sexchnaidre & Co.	143	
1852	F. Reine & A. Sexchnaidre	200	
1853	"	287	
1854	"	255	
1855	"	135	
1856	"	80	
1857	"	204	
1858	"	290	
1859	"	61	
1860	"	97	
1861	"	300	
1868	F. Reine & Others	----	210
1869 <sup>2</sup>	John Chapman	----	560
1870	"	64	
1871	"	72	
1872	"	51	
1873	"	36	
1874	"	70	
1875	"	78	
1876	"	112	
1877	"	76	
1878	"	98	
1879	"	68	
1880	"	65	225
1881	"	30	40
1882	"	107	
1883	"	96	
1884	Chapman & Reine	22	2,150
1885	"		2,530
1886	"		2,420
1887	"		1,650
1888 <sup>3</sup>	"		1,200

<sup>1</sup>Steam powered mill

<sup>2</sup>Wood sugar house; steam and kettle apparatuses

<sup>3</sup>The plantation continued to be listed under the ownership of Chapman & Reine until 1916, but no crops were reported.

**Table 5. Sugar Production at Longview Plantation**  
(Championier 1844-1862; L. Bouchereau 1868-1877;  
A. Bouchereau 1878-1914).

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>	<u>Rice in Bbls</u>
1844	Dr. A. Humphreys	256	
1845	A. Humphreys & F. Poche	200	
1849	Mrs. Alexander Humphrey	141	
1850 <sup>1</sup>	"	121	
1851	"	114	
1852	"	260	
1853	"	385	
1854	"	178	
1855	"	24	
1856	"	70	
1857	"	182	
1858	"	285	
1859	"	74	
1860	"	133	
1861	"	282	
1869 <sup>2</sup>	William H. Gill	N. Y.	2,625
1870	Ball & Curtis	10	
1871	"	100	
1872	"	108	
1873 <sup>3</sup>	"	35	
1874	Frank R. Curtis	28	
1875	"	15	
1876	"	22	
1877	"	8	
1878	"	13	
1879	Joseph Gebelin	13	140
1880	"	----	543
1881	"	----	516
1882 <sup>4</sup>	"	60	
1883	"	83	700
1884	"	60	600
1885	"	32	2,100
1886	"	20	1,430
1887	"	44	1,430
1888	Gibelin & Renaud	60	770
1889 <sup>5</sup>	"	48	1,320

<sup>1</sup>Steam powered mill

<sup>2</sup>Brick and shingle sugar house; steam and kettle apparatuses

<sup>3</sup>Sugar house burned

<sup>4</sup>Wood sugar house; steam and kettle apparatuses

<sup>5</sup>The plantation continued to be listed under the ownership of Gibelin & Renaud until 1897, but no crops were reported.



the upriver end of the project area, was Jean Laiche's plantation (Table 6, Figure 3). The above-mentioned plantations all were equipped with steam powered sugar mills (Champomier 1844-1862).

In addition to these plantations, there were two zones of small farms within the project area. The downriver zone was located between Golden Grove and David plantations; the larger upriver zone was located between Longview and the Laiche Plantation (Figure 3). Land within these tracts was owned primarily by Acadian farmers, who probably engaged in subsistence and truck farming. Some of them may have cultivated small amounts of cane, which they could mill at neighboring plantations. Jean Laiche's sugar reports suggest that he processed cane for U. Sexchnaidre and the Decarre Brothers (Table 6).

In the decade before the War Between the States, cane production increased on small landholdings in the vicinity of the project area. By 1850, the Poches, who owned the largest parcels between Longview and the Laiche plantation, grew cane which they processed at their horse powered mill (Table 1, Figure 3). Small farms immediately upriver from the project area, including those owned by Timon Bourgeois, Mrs. A. Schexnaidre, and F. Sexchnaidre (Table 1, Figure 3), also began producing cane at this time.

In 1860, on the eve of the War Between the States, J. W. Dorr described St. James Parish:

The further I journey up the Coast, the more anxious do I feel to vindicate this beautiful country from the aspersions cast upon it by tourists who dash down the Mississippi in steamboats, and very likely fall asleep in their berths, and dismiss the matter with the favorite form of words, viz: "The banks of the Lower Mississippi are low and monotonous, and the scenery tame and uninteresting." So the picture doubtless looks to them from their point of view, framed as it is in the foreground with the muddy and rubbish-covered banks of the river outside the levee mound. But let them travel inside the levee, and through this paradisiacal climax of luxurious plantation rurality, and if they do not admire the aspects of the scenery--the splendid villa-like or castle-like mansions of the planters, the cheerful and comfortable villages of negro houses, the magnificent old trees with their wavy glory of moss, the beautiful gardens filled with the rarest shrubs and plants, the affluent vegetation of the broad fields, the abundant greenery with which lavish



**Table 6. Sugar Production at an Unnamed Plantation  
Fifty-two Miles Above New Orleans  
(Champomier 1844-1862; L. Bouchereau 1868-1877;  
A. Bouchereau 1878-1914).**

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>	<u>Rice in Bbls</u>
1844	Jean Laiche	89	
1845	J. Laiche, U. Sexchnaidre Decarre Bros.	52	
1849	J. Laiche, U. Sexchnaidre & Co.	62	
1850 <sup>1</sup>	"	64	
1851	Jean Laiche	59	
1852	"	35	
1853	"	165	
1854	"	122	
1855	"	45	
1856	"	22	
1857	"	72	
1858	"	99	
1859	"	22	
1860	"	62	
1861	"	153	
1868 <sup>2</sup>	L. Laiche & Bros.	63	
1869	"	32	
1870	"	55	
1871	"	22	
1872	"	24	
1873	"	32	
1874	"	41	
1875	"	39	
1876	"	33	
1877	"	46	
1878	Clement Ory & Co.	54	
1879	"	35	
1880	"	----	425
1881	"	----	1,780
1882	"	----	2,775
1884	"	----	3,000
1885	"	----	330
1886	"	----	198

<sup>1</sup>Steam powered mill

<sup>2</sup>Wood sugar house; steam and kettle apparatuses

nature coats every inch of this prolific soil-- if they do not admire this on the one hand, and on the other the broad tide of the Father of Waters swelling through the long reaches of its winding channel and dotted with steamers or other craft, we will set them down as travelers either of no taste or so filled with prejudice as to be determined not to see anything worthy of admiration in any part of the South.

The forces of the different plantations are very busy hoeing the cane at this time, and on some of them I remark long ranks of fifty to a hundred negroes, hoe in hand, working across the fields with almost the precision of military drill. Of course, estates which can have so many hands detached for one duty belong to the largest class. The exceedingly neat, spacious and comfortable character of the negro quarters all along up the coast should be especially mentioned. I have noted some of these villages containing thirty, forty, or fifty houses each, every one of which would rent for from \$12 to \$16 per month, according to the part of New Orleans in which it might be situated.

Every plantation seems to have its flock of sheep, and in many instances this stock is nearly pure South-down breed. The cattle, too, are fine stock. The carriage horses of the planters are splendid animals; and, for plantation riding, they generally use the strong and hardy and easy-going, but not very handsome, horses of the Attakapas breed (Pritchard 1938:118-119).

#### The War Between the States

The War Between the States devastated Louisiana plantations. Planters all along the Mississippi had difficulty obtaining supplies and marketing their crops. The historian Alcee Fortier, grandson of the prominent St. James planter, Valcour Aime, described the arrival of Union troops in the parish:

After the fall of New Orleans, the Federal gunboats ascended the river, and being attacked by Confederate batteries on the banks, bombarded the plantations as they passed. This was natural where there were batteries, but, too often, houses were bombarded in front of which

stood no batteries. How well do I remember the flight of our whole family to the river front to seek the protection of the levee, whenever a gunboat was coming. There we stood behind the levee, my sisters and myself, our school mistress and our nurses, while our father stood on the levee to look at the Federal gunboats and at the shells, which generally passed over our heads, but which, occasionally were buried in the levee and covered us with dust. Our house was never touched by the shells, but those of a number of our relatives and friends were considerably damaged, and I remember seeing cart loads of bolls strewn in the yards. How dramatic all this was: the huge iron clad Essex passing in triumph the river batteries, her shells whizzing like huge meteors over our heads, and we helpless against the invaders! I remember also the holes dug in the ground and covered with thick beams and several feet of earth, the inside arranged like a comfortable room and filled with provisions of all kinds. Then came the Federal soldiers in garrison on the plantation, and well-behaved: then the insolence of some of the liberated slaves, the temporary arrest of my father and my grandfather, the serio-comic scenes at the provost marshal's court, where, too often, favors, or rather rights, had to be bought; then the flight of the family to the Teche and the pillaging by the conquering army; the return home and the complete ruin (Fortier 1894:221-222).

Union troops landed at Convent in May. General Butler ordered the nuns at the Convent of the Sacred Heart to lower their French flag and to raise the Union flag; the Mother Superior refused to comply with the latter command. Butler stationed troops at the convent to protect the nuns. When the Mother Superior later pleaded with Butler to stop his troops' ransacking of St. James plantations, Butler complied with the request (Bourgeois 1957:48-49).

#### The Postbellum Period

Louisiana's sugar industry, which had been seriously affected by the war, was slow to recover. Prices fell, credit was tight, and it was nearly impossible to keep slaves on the plantation (Begnaud 1980:38-39; Goodwin and Yakubik 1982b). Many

planters lost their plantations as a result of financial difficulties. Throughout most of the nineteenth century, the level of sugar production did not approach that of the peak year 1861. Causes for the problems were:

Changes in labor systems, bad politics and government, and fear that the (sugar) tariff would be abolished or greatly modified, preventing capital from being invested...(A. Bouchereau 1889-1890:53a).

Loss of slave labor encumbered recovery. Former slaves were regarded as unreliable and a political threat; L. Bouchereau (1870-1871:XIX) endorsed employment of German and Chinese contract labor. A pervasive lack of capital was probably the greatest impediment to revitalization of the sugar industry. Planters could not afford to rebuild their sugar houses, nor could they repair levees. Many former sugar plantations were inundated during high water. As a solution, L. Bouchereau (1873-1874:XII; 1876-1877; 1877-1878:XX) urged that agricultural and industrial aspects of sugar production be separated. His solution, the "Central Factory System," included centralized mills to serve the needs of many planters. Benefits were obvious. Because manufacture of sugar from cane entailed the greatest expense, the system helped alleviate individual planter's financial and labor difficulties. Also, farmers with small holdings could now afford to grow cane.

#### Sugar Production in the Vicinity of the Project Area During the Postbellum Period

Changes in land ownership were frequent within the project area; crop production was irregular, and documentation of that production probably was inconsistent (L. Bouchereau 1869-1877; A. Bouchereau 1878-1914). In order to establish a definable area for diachronic examination of changes in agricultural production, it was necessary to extend the area under consideration beyond the boundaries of the present project corridor. Sugar and rice production data were recorded for the area from Golden Grove Plantation to, but excluding, Bellevue Plantation, which was located approximately one mile upriver from the project boundary.

Figure 4 shows the number of sugar planters within this area (roughly corresponding to present-day Paulina, Litcher, and Gramercy) during the antebellum and postbellum periods. The number of planters increased following the War Between the States. New sugar houses built after the war included those at Mayflower Plantation, Lowther Plantation, and Raphael Bauvais' plantation (Table 1). Within the project area, A. and F. Monty built a mill at

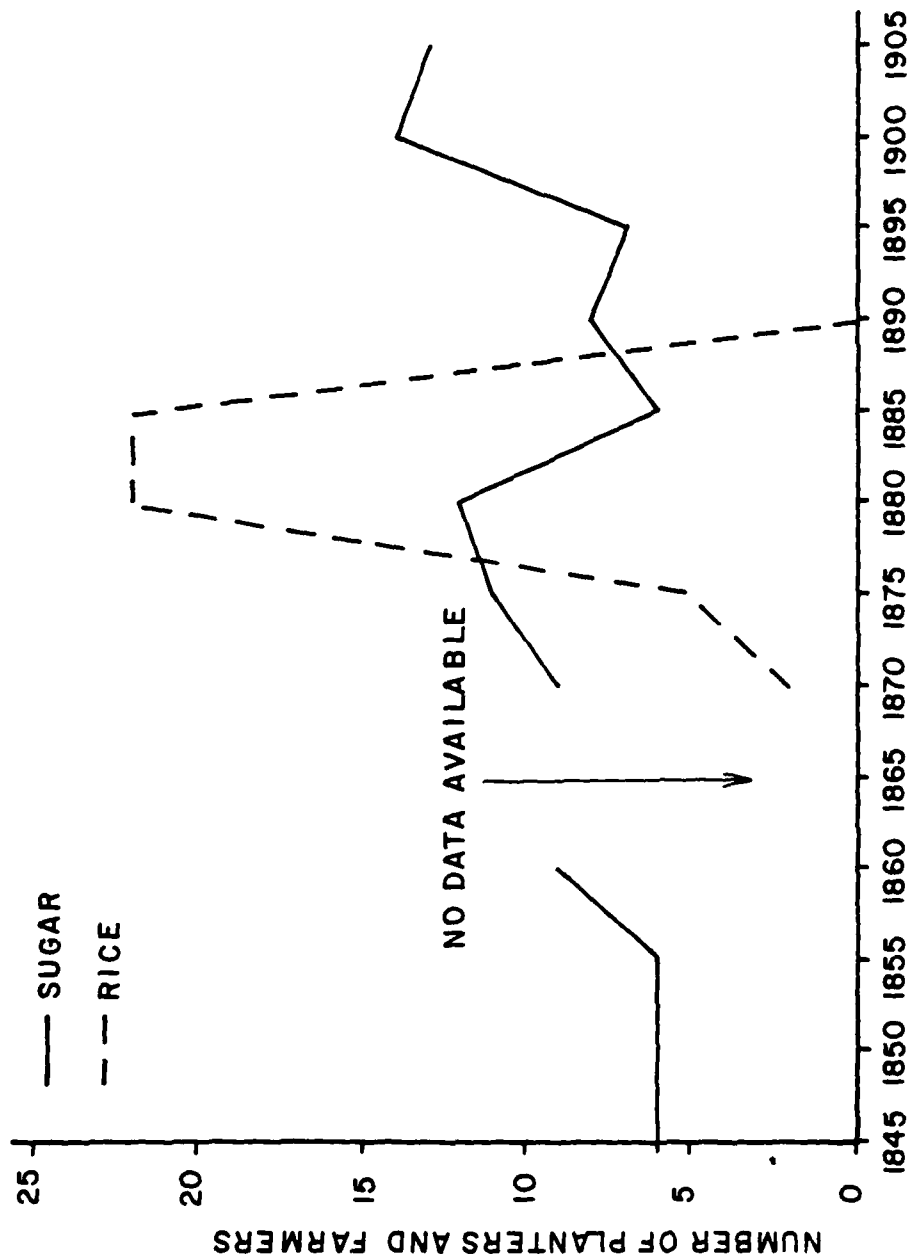


Figure 4. Line graph illustrating the number of sugar and rice planters in the vicinity of Paulina, Litcher, and Gramercy between 1845-1905 (Champonier 1844-1862; L. Bouchereau 1868-1877; A. Bouchereau 1878-1914).

their plantation, which they operated for only one year (Table 1); Raphael Beltran established Red Hot Plantation between Golden Grove and David Plantations (Table 7). Of the twenty plantations which operated for ten years or more within this area, twelve were established during the postbellum period (Table 8). Low sugar production at these plantations suggests that most were small landholdings (Tables 1 and 8). Golden Grove, Regina, and Longview were the only plantations in this area that were considered notable in 1871 (Figure 5); map evidence from the 1890s confirms the presence of numerous small farms in the project area after the Civil War (Tables 2 to 6).

In 1896, a Central Factory was established within the project area by the Gramercy Co., Ltd. which acquired both Golden Grove and David Plantations in 1897 (Tables 2 and 3). The factory processed cane from their own plantations and from local, independent planters; therefore, sugar production at the Gramercy Factory exceeded that of the plantations and farms in the area (Table 9).

In 1903, the company changed its name to the Colonial Sugars Company. A ten-story, brick and steel bone-char filter building was added to the sugar house so that sugar could be refined on a year-round basis (St. James Parish Development Board 1954). The factory was one of the few in the world that produced both raw and refined sugar. In 1908, the company was purchased by and became a subsidiary of the Cuban American Sugar Company, which decided in 1915 to discontinue milling cane; the plant has concentrated since then on production of refined sugar (St. James Parish Development Board 1954).

#### Rice Production During the Postbellum Period

In many parishes after the War Between the States, plantations and farms produced rice because of lack of requisite capital for sugar production. Bouchereau and Bouchereau wrote:

Many of the old sugar plantations are planted in rice for want of the necessary means to rebuild or repair sugar houses, etc., while others are only partially cultivated owing to the encroachment of water from crevasses, and many are completely abandoned on account of overflow (L. Bouchereau 1877-1878:XX).

Rice was an appropriate crop after the War Between the States. Inundation of fields due to lack of maintenance of levees could ruin cane; however, flooding was necessary for rice cultivation. The cultivation and economics of rice are detailed elsewhere (Goodwin, Yakubik, Stayner and Jones 1984).

**Table 7. Sugar Production at Red Hot Plantation**  
**(L. Bouchereau 1868-1877; A. Bouchereau 1878-1914).**

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in Hhds</u>
1878 <sup>1</sup>	Raphael Beltran	111
1879	"	21
1880	Adam Parent	68
1881	"	80
1882	"	150
1883	"	75
1884	Adam Isidore	90
1885	"	115
1886	"	40
1887	"	128
1888	"	145
1889	"	92
1890 <sup>2</sup>	Widow Marceline Ezidore	----

<sup>1</sup>Wood sugar house; steam and kettle apparatuses

<sup>2</sup>The plantation continued to be listed under the ownership of Widow Ezidore until 1916, but no crops were reported.

**Table 8. Sugar Plantations or Farms in the Vicinity of Paulina, Lutchter and Gramercy that Operated for Ten Years or More (Championier 1844-1862; L. Bouchereau 1868-1877; A. Bouchereau 1878-1914).**

<u>Name</u>	<u>Average Sugar Production in Hhds.</u>	<u>Years</u>
Eugene Laiche	not given	1898-1916
Gustave Laiche ("St. Mary")	not given	1890-1916
Edward Cambre	29	1873-1889
Schexnaidre et al.	49	1858-1916
Felix Brignac	not given	1898-1916
St. Joseph	128	1859-1916
Mayflower Plantation	82	1883-1916
L. P. & G. Bourgeois	not given	1898-1916
Raphael Bauvais	73	1869-1883
Laiche et al. (viz. Table 6)	59	1844-1889
François Poche	81	1850-1888
Eugene Poche	18	1872-1882
Longview Plantation	105	1844-1897
Regina Plantation	122	1844-1916
Mears, Reine and Co.	not given	1898-1916
David Plantation	380	1844-1916
Ovid Millet	11	1874-1892
Red Hot Plantation	93	1878-1916
Gramercy Co. & Colonial Sugar Co. (Table 9)		1896-1916
Golden Grove Plantation	429	1844-1916



**Table 9. Sugar Production at the Gramercy  
Central Factory (L. Bouchereau 1868-1877;  
A. Bouchereau 1878-1914).**

<u>Year</u>	<u>Owner/Manager</u>	<u>Sugar in lbs</u>
1896 <sup>1</sup>	The Gramercy Co. Ltd.	3,696,960
1898 <sup>2</sup>	"	4,150,800
1899 <sup>3</sup>	"	4,156,989
1900	"	10,710,000
1901	"	12,665,959
1902	"	9,600,000
1903	Colonial Sugar Co.	7,158,240
1904	"	7,665,515
1905	"	5,789,000
1906	"	2,280,240
1907	"	4,135,398
1911	"	8,823,300
1912	"	9,013,012
1913	"	9,940,127
1914	"	8,147,955
1915	"	----

<sup>1</sup>Brick and shingle sugar house; steam tram, vacuum pan, and centrifuge apparatuses

<sup>2</sup>Wood sugar house

<sup>3</sup>Triple effects vacuum pan and centrifuge apparatuses.

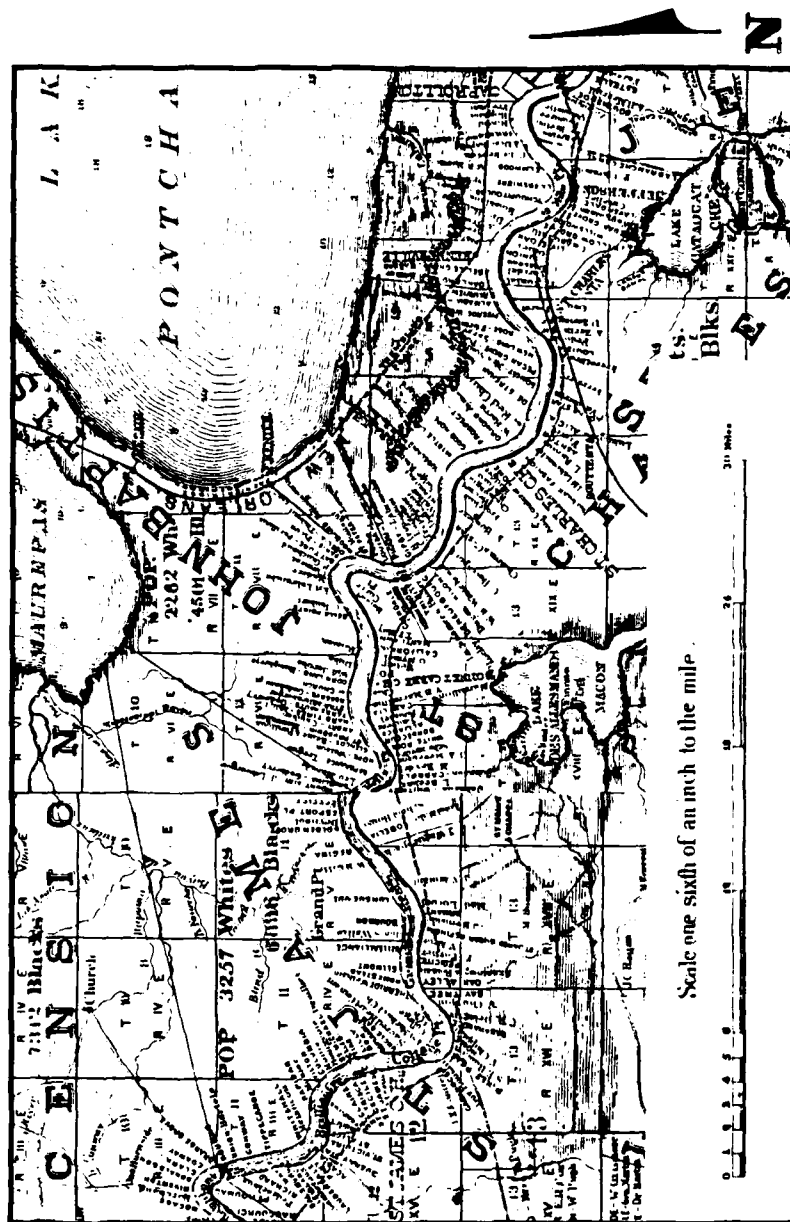


Figure 5. Excerpt from Hardee's 1871 Official Map of Louisiana, showing Golden Grove, Regina, and Longview Plantations (Map Division, Library of Congress).

Figure 4 shows the number of planters and farmers producing rice in the vicinity of the study area during the postbellum period; the number suddenly increased in 1880. Rice production peaked between 1880-1885; none was reported after 1890. This may be a function of reporting and recordation, because rice remained an important crop in the parish well into the twentieth century.

Although some plantations in the area, including Golden Grove, David, Regina and Longview, grew rice after the war, most production was by small farmers who produced rice irregularly. Many farmers grew the crop for only one year (Table 10). Some of these individuals may have been tenant farmers, because at least two grew rice on different parcels in different years (Table 10).

#### Expansion of the Lumber Industry

Simultaneous with recovery of the sugar industry and expansion of rice cultivation, the lumber industry, which began in the antebellum period, experienced rapid growth. In 1849, the United States Congress granted to the state of Louisiana swamplands and flooded areas which were unfit for cultivation, thereby making available millions of acres of virgin timber. The Louisiana Legislature was to dispose of these lands and to use the proceeds for construction of levees and drains (Norgress 1947:986-987). Louisiana accepted the grant in 1850 (Norgress 1947:989); five years later, the Louisiana State Legislature approved the sale of one million acres of swamp and overflow lands in tracts of 40 to 640 acres. Each acre was to be sold for not less than \$1.25. However, few of these tracts were purchased prior to the War Between the States, because the swamps were considered inaccessible. Later, the Homestead Act passed by the United States Congress in 1866 effectively prevented sale of the swamp lands by specifying that lands in Louisiana, Mississippi, Alabama, Arkansas, and Florida could be acquired only through occupation and cultivation. However, this did not prevent illegal harvest of timber:

...entry men would go to the land office and upon payment of a five dollar fee would enter the land, despoil the timber with no intention of "proving up for a homestead... the system prevailing favored the "trespasser" and the trespasser alone (Norgress 1947:975).

In 1874, only 65 of 4,040 entries had been proven up and received final certificates (Norgress 1947:995).

Passage of the Timber Act of 1876 again permitted the sale of

**Table 10. Farmers in the Vicinity of Paulina, Lutcher,  
and Gramercy Who Grew Rice (L. Bouchereau 1868-  
1877; A. Bouchereau 1878-1914).**

<u>Name</u>	<u>Average Production in Bbls</u>	<u>Years Listed</u>
Edward Cambre	458	1885-1889
Florian Brignac	533	1885-1880
St. Joseph Plantation	633	1885
Mayflower Plantation	1,765	1883-1885; 1888-1889
Alexander Brignac	193	1888*
Felicien Laiche	413	1888*
Artidore Roussel	191	1888*
Honore Laiche & Co.	44	1888*
Lowther Plantation	1,815	1885
T. Decaret	330	1885*
Theodore Bourgeois	265	1884*
Prudent Bourgeois	245	1884*
J. J. Bourgeois	314	1884-1885
T. Schexnyder	346	1885*
Valery Laiche	330	1885*
Sylvanie Laiche	384	1882; 1885; 1888-1889
F. Blertel/Wid Felix Polet	207	1876-1882
Laiche Bros.	2,000	1883*
Oscar Babin	336	1876-1877; 1883
Clement Ory	1,418	1880-1885; 1889
Emile Parent	58	1880; 1889
Charles Frederick	167	1880-1881; 1884-1885; 1889
Romain Berthelot	881	1881-1889
Francois Poche & Co.	492	1873-1875; 1878; 1883-1884; 1888
Victor Fontenau	65	1873*
Marcelin Roussel	556	1878-1889
Francois Victor/J. B. Joubert	173	1880; 1884; 1889
Francois Brignac/C. M. Brignac	226	1880-1881; 1884-1885; 1889
Louis Louque/Jules Louque	203	1880-1881; 1884-1885; 1889

Table 10. (continued)

Eugene Poche <sup>1</sup>	215	1872-1874; 1878;
Wid. W. P. Gibson	30	1880-1882
Lovinsky Reine <sup>1</sup>	402	1872-1875 1872-1876; 1878-1888
Emilien Faucheux	85	1878; 1880; 1884
N. Manada	150	1884*
Sydney Dupuis	392	1884*
Joseph Whiteman	20	1880*
Valmire Shedrick	66	1878; 1880-1881; 1884
James Washington	82	1878; 1880-1881; 1884
Henry Brigrac	52	1880-1881; 1884
Efferson	197	1880-1881; 1884
L. O. Courseault	130	1884
Paul Mike	259	1884*
Victor Mike	54	1884; 1889 1878;
Richard Bruno	49	1880-1881
Poche	483	1889*
Thomas Pollet/Jules Louque	170	1868-1869
Eugene Poche <sup>1</sup>	86	1868-1869
R. Levy	76	1876
Longview Plantation	1,043	1876* 1869; 1878-1881; 1883-1889
Aristide Bourgeois	12	1872-1873
Valey Roussel	103	1880-1881; 1888
Mme Lucien Schexnydre	35	1880*
Alcee Melancon et al.	336	1880-1881; 1885-1886; 1888
Etienne Schexnydre	1,100	1886*
Pierre Schepp	1,131	1886-1889
Regina Plantation	1,221	1868-1869; 1880-1881; 1884-1888
Levensky Reine <sup>1</sup>	286	1868-1869
David Plantation	12	1868
Denis Johnes/Ovide Millet	35	1873-1874; 1876

Table 10. (continued)

A. Ory et al.	500	1869*
Laiche and Brignac	2,400	1885*
Sundry Planters	5,400	1885*
Golden Grove	3,119	1875-1876; 1880-1881; 1883; 1886-1888

<sup>1</sup>Reine and Poche probably were tenant farmers since they farmed different parcels during the postbellum period.

\*Farmers listed for only one year

almost unlimited quantities of forest land (Norgress 1947:996). The following year, Louisiana's swamp lands were divided into three classes: swamp lands, lands subject to overflow, and timber lands. Prices ranged from 12.5 cents to \$1.25 per acre. Cypress swamps now were considered accessible, and exploitation of their timber was economically feasible.

Thus, during the last quarter of the nineteenth century, virgin cypress forest could be acquired for a minimal investment; deforestation of Louisiana's swamps began. Technological improvements during the 1880s and 1890s are discussed in detail elsewhere (Goodwin, Yakubik, Selby and Jones 1985); these accelerated the growth of the lumber industry. The Lutchter and Moore sawmill probably was established at this time, although documentation on this company is not readily available. An 1894 map shows the sawmill located upriver from David Plantation; this lumber yard probably was located on a portion of the former Regina Plantation holding (Figure 6). Spurs from the Yazoo and Mississippi Valley Railroad led to the mill structure, in front of which was a large mill pond. Upriver from the pond was a complex of small structures, probably offices, storage areas, and residential structures for the laborers (Figure 6).

#### Twentieth Century Development

By 1900, the settlements of Lutchter and Gramercy developed around the holdings of the Lutchter and Moore Sawmill and the Colonial Sugars Factory, respectively (Figure 7). In 1914, Lutchter, with a population of 1,028, was one of the largest towns in the area. It had a well-developed lumber industry, and it became the local shipping point for agricultural products from surrounding areas (Fortier 1914:107). Local produce from small farms included sugar, rice, vegetables, and Perique tobacco, a crop peculiar to St. James Parish.

During the first two decades of this century, sugar was cultivated on the higher grounds close to the Mississippi River; rice was grown on the wet, back lands. Cultivated fields extended back from the river for a distance of three to six miles (Fortier 1914:415).

Louisiana's lumber industry declined during the 1920s. Drought dried the swamps in 1924. Two years later, a hurricane destroyed significant quantities of timber, and fallen trees blocked lumber canals. The 1927 flood further disrupted transportation. Finally, by the early 1930s, Louisiana's supply of virgin cypress was depleted. Coincidentally with the Great Depression, Louisiana's lumber mills began to close. The Lutchter and Moore Sawmill was extant at least until ca. 1929 (Figure 8).

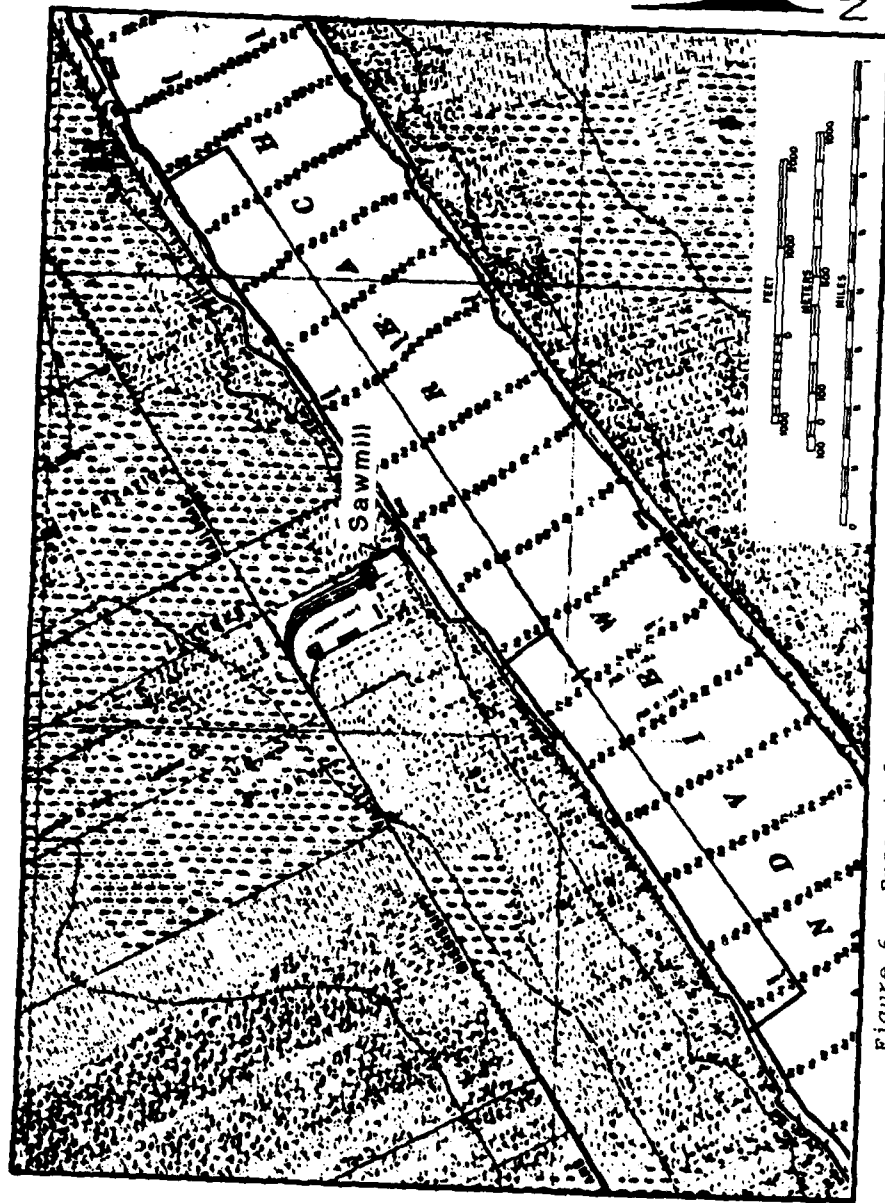


Figure 6. Excerpt from Chart 72 of the 1876 Mississippi River Commission Maps, drafted in 1894 and illustrating the Luta and Moore Sawmills (Map on file, R. Christopher Goodwin and Associates, Inc., New Orleans).



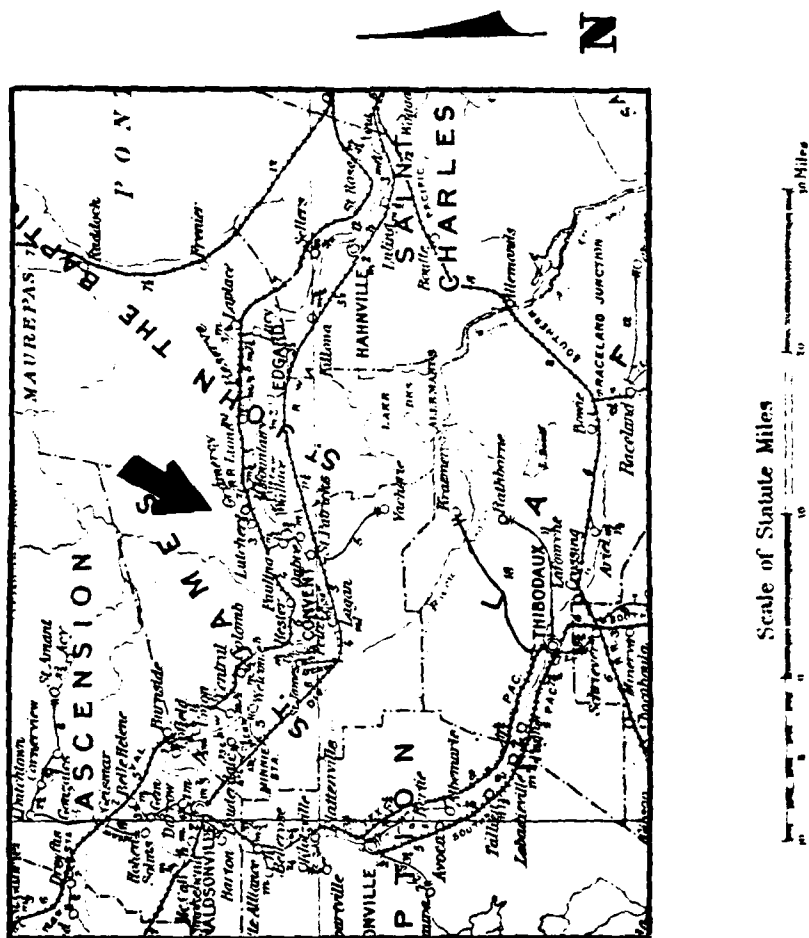


Figure 7. Excerpt from the 1902 Post Route Map of the State of Louisiana (Map Division, Library of Congress).









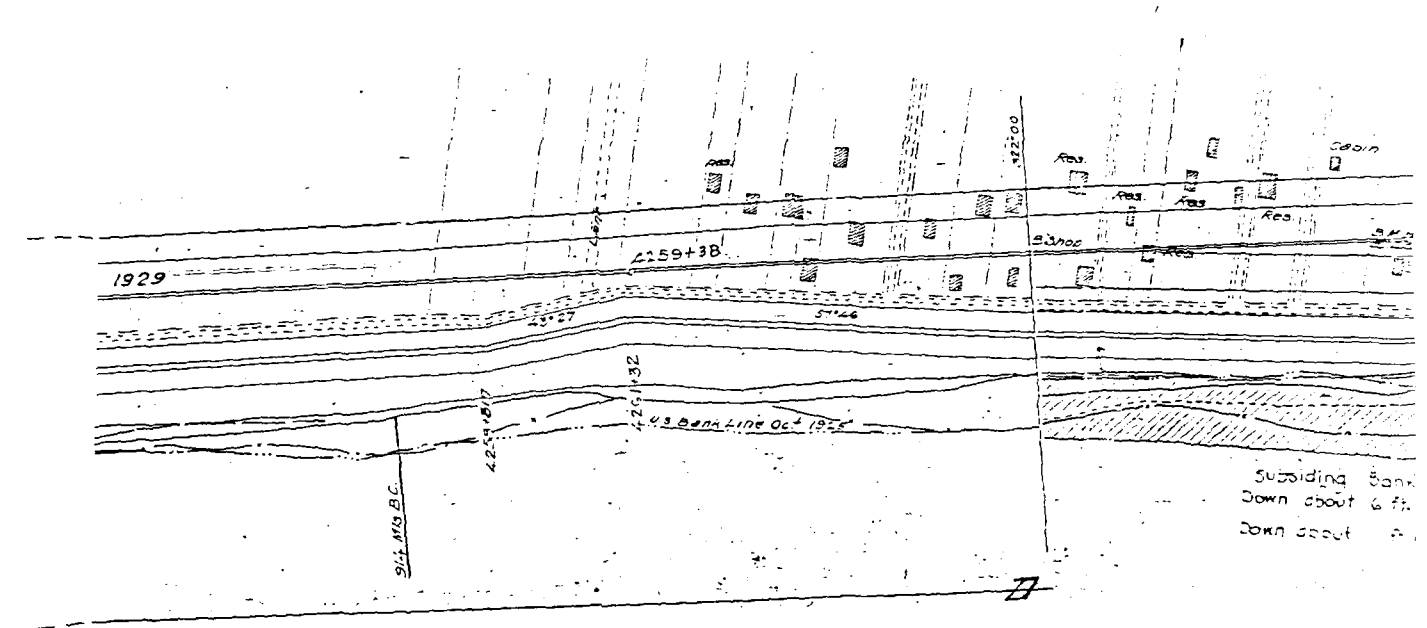
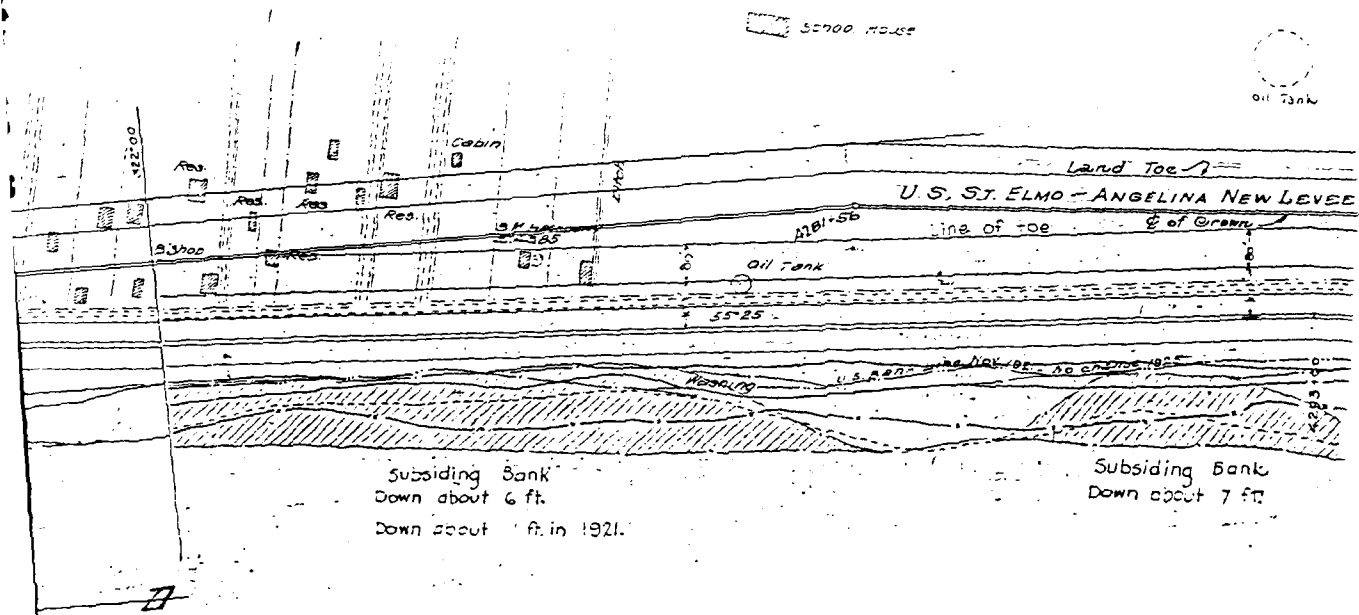


Figure 8, Continued.

2



It probably closed a short time later.

Only 69,503 acres of land were cultivated in St. James Parish by the 1950s; 20,000 acres were dedicated in cane. Most cane fields were located on the west bank of the river. Rice continued to be an important crop in low lying areas. Truck farming expanded, particularly in the areas of Litcher, Paulina, Grand Point, Hester, Convent, Central, and Union. Truck crops included cabbage, eggplant, peppers, corn, and shallots; cultivation of small quantities of Perique tobacco continued. Livestock, particularly cattle, increased in importance from the 1940s onward; fallow rice and cane fields frequently were used for pasture. In the 1950s, most farms in St. James Parish were operated by their owners. Tenant farmers worked most of the remaining lands (St. James Parish Development Board 1954).

Agricultural processing continued as a major industry in St. James Parish throughout the twentieth century. Refinement of cane sugar was the largest single industry in the parish through the 1950s; refining companies included the Colonial Sugars Company established in 1896 at Gramercy; the Armant Sugar Factory at Vacherie; the St. James Sugar Cooperative, Inc., established on the west bank in 1945; and the Helvetia Sugar Cooperative, Inc., established in 1934. The S. C. Johnson and Son Company began to refine sugar cane wax in 1947. Plants for rice milling and drying rice were located at Vacherie, Gramercy, and Union during the 1950s and a Spanish Moss Gin, an ice factory, and a cement works were established in Litcher.

The petrochemical industry has assumed increased importance to the economy of St. James Parish since the 1940s and 1950s. Both oil and natural gas are produced at present, and oil refining is a major industry. Agriculture remains significant to the local economy. Soybean cultivation has increased; crawfish farming is a new and growing industry. Rice is no longer cultivated, but cane, tobacco, corn, hay, oats, fruits, vegetables and livestock are important products.

#### Summary of Themes Significant to the Project Area

St. James Parish was sparsely settled until the Spanish Colonial Period. Early colonists were Acadian immigrants who established themselves on small farms and concentrated on subsistence agriculture. Although some of these small landholdings were consolidated into sugar plantations during the antebellum period, small farms characterized two areas of the project corridor until the War Between the States. Economic diversification began, then accelerated, during the postbellum



period. Larger quantities of rice were grown, especially by small farmers. The sugar industry recovered after the war, and a Central Factory was established at Gramercy. A lumber mill was founded by the Lutcher and Moore Company during the final quarter of the nineteenth century. Population continued to increase into the twentieth century, but most land in the vicinity of the project area continued to be devoted to agriculture.

Several major themes significant to the history of the area can be identified from the above overview. These include Acadian settlement of St. James Parish, the development of the antebellum sugar industry, the role and nature of small farms during the antebellum period, postbellum industrialization of sugar production, development of the postbellum rice industry, development of Louisiana's lumber industry, and the nature of twentieth century agricultural communities. These themes provide a framework for evaluating the historical significance of cultural remains recovered during archeological survey.

Based on examination of late nineteenth and early twentieth century maps, remains from those periods were expected in the Angelina Revetment item (Table 11). Although no maps showing structural remains from antebellum plantations in this area were found, late postbellum/early modern development probably destroyed remains predating the War Between the States. For this reason, no colonial remains were expected, despite the fact that the area was settled in the mid-eighteenth century.

Table 11. Archeological Expectations Based on Historic Map Research.

<u>Area</u>	<u>Historic Use</u>	<u>Expectations</u>
Section 24 through 33 and the upriver portion of Section 34 in T12S, R5E	Formerly farmsteads and small plantations	Habitation remains from late nineteenth and early twentieth century farmsteads, possibly disturbed by levee construction and borrowing activity.
Section 34 and 35 in T12S, R5E, and Section 33 in T11S, R5E	Formerly the Lutcher and Moore Lumber Company	Habitation and industrial remains related to the sawmill, possibly disturbed by levee construction and borrowing activity.
Section 35 and 36 in T12S, R5E	Formerly the structurally unimproved agricultural fields of David plantation. One structure previously was located in Section 36	Remains from the unidentified structure in Section 36, possibly disturbed by levee construction and borrowing activity.
Sections 51 through 40 in T12S, R5E	Formerly farmsteads, and the settlement of Granercy, and Golden Grove Plantation	Habitation remains from the late nineteenth and twentieth centuries possibly disturbed by levee construction and borrowing activity.

## CHAPTER VI

### FIELD INVESTIGATIONS

#### Introduction

Fieldwork at Angelina was designed to locate and identify all cultural resources within the project area, to assess the potential for data recovery of these sites, and to determine which sites require protection from construction until all necessary investigations have been completed to evaluate individual eligibility status for the National Register of Historic Places. As noted above, archeological field survey was conducted in two phases within two separate survey segments, corresponding to the priority work schedule of the New Orleans District, U.S. Army Corps of Engineers. However, because the survey segments comprise two contiguous areas of batture, they are treated below as a single survey corridor. The project area, then, extends for approximately 2,643 m along the east (left descending) bank of the Mississippi River between Levee Stations 4218+21 (Range Number U-80) and 4098+14 (Range Number U-200), and it extends landward from the water line of the Mississippi River to the toe of the Mississippi River Protection Levee (Figure 1).

Fieldwork consisted initially of an intensive pedestrian survey of the entire project area, and of systematic subsurface shovel testing. Eight archeological sites consisting of surface scatters of historic material were encountered during this phase of the fieldwork. These sites subsequently were the subject of additional field testing, including surface collection, and subsurface shovel and auger testing. Where appropriate, stratigraphic profiles were cleaned along the cutbank. Sketch maps and photographs showing the location of each site were executed. Horizontal and vertical controls for each spot find or site were established using Levee Station Survey markers along the Mississippi River Protection Levee crown. Sites were plotted on 7.5' quadrangles and on aerial mosaic project area maps. These maps are appended to this report.

#### Pedestrian Survey and Subsurface Testing

Pedestrian survey was implemented using linear transects parallel to the bankline of the Mississippi River. Maximum transect width was 20 m, and the entire length of the project area (about 2,643 m) was surveyed between the water line and the riverside toe of the Mississippi River Protection Levee. Shovel tests to an average depth of 45 cm below surface were excavated at 50 m intervals within each transect. All cultural resources

encountered during survey were staked and flagged.

Eight surface concentrations of historic period artifactual remains were identified during the intensive pedestrian survey. These sites occurred principally along the bankline and cutbank of the Mississippi River; however, in situ cultural deposits from which these remains may have originated were not observed. The concentrations were designated Angelina Sites 1 through 8 in the order of their discovery. Subsurface testing, conducted simultaneously with the pedestrian survey, failed to identify additional cultural resources.

#### Site Testing

Site testing was designed to determine area, depth of cultural deposits, stratigraphy, cultural associations, function, date(s) of occupation, and condition of each site. Recovery techniques included a combination of surface collection and subsurface testing. Virtually one hundred per cent of artifactual remains were collected at sites with low density surface manifestations (Angelina Sites 1, 3, 4, 6, 7, 8). At Angelina Site 2, transect-based surface collection was applied; Angelina Site 5 was collected in zones.

Subsurface examination included shovel tests at 10 m intervals along rays extending from the approximate center of each site. This permitted recordation of the presence and extent of shallow sub-surface remains. Auger tests also were placed within each site, in order to determine both the stratigraphic setting and the presence or absence of more deeply buried cultural deposits. Where appropriate, stratigraphic profiles were cleaned and mapped along the cutbank. The results of the testing effort are described below.

#### The Sites

A total of eight archeological sites were recorded and tested. As noted above, these sites were designated Angelina Sites 1 through 8. State Survey numbers have been assigned as follows:

Angelina Site No.	State Survey No.
1	16 SJ 41
2	16 SJ 42
3	16 SJ 43
4	16 SJ 44
5	16 SJ 45
6	16 SJ 46
7	16 SJ 47
8	16 SJ 48

Generally, the sites consisted of limited horizontal scatters of historic ceramics, glass, metal, bricks, and brick fragments along the bankline and cutbank of the Mississippi River. They were poorly preserved, and they all lacked contextual integrity. Erosion, wave-washing, and redeposition characterized natural processes affecting the cultural remains. Anthropogenic destructive processes, such as bottle collecting at Angelina Site 5, also were evident.

Angelina Site 1 (16 SJ 41) (Figures 9, 10, and 11) is located at the bankline about 145 m upriver from the Lutchter Ferry Landing. Sparse cultural remains, distributed within an area of about fifteen square meters, occur at the surface and within recent overbank deposits. Virtually 100 per cent of the surface material from the site was collected. A total of eleven shovel tests were placed along three rays originating from the top of the cutbank below which the cultural remains were observed (Figure 9). None of these subsurface tests showed evidence of cultural remains. One auger test, located at the site datum and excavated to a depth of 100 cm, revealed a series of culturally sterile overbank deposits (Figure 10). In addition, one stratigraphic profile was cleaned along the cutbank (Figure 11). The upper strata (I-IV), between 0 and about 70 cm below surface, consisted of sterile silty and clayey overbank deposits. These strata dip upriver in profile. Wood fragments and cultural remains (brick) were present within Stratum V, a dark greyish brown (10 YR 4/2) clay. Cultural material is also present in Strata VI and VII, to the base of the profile at about 140 cm below surface. Bricks and brick fragments are more common in these two strata, which consist of brick rubble and mortar fragments within a silty clay matrix. At 16 SJ 41, intact cultural deposits appear to be absent; rather, the stratigraphy exposed in the cutbank suggests that recent slumping of overbank deposits has concentrated artifactual remains at the base of the profile (cutbank). Further erosion and redeposition may have contributed to the present distribution of remains along the bankline.

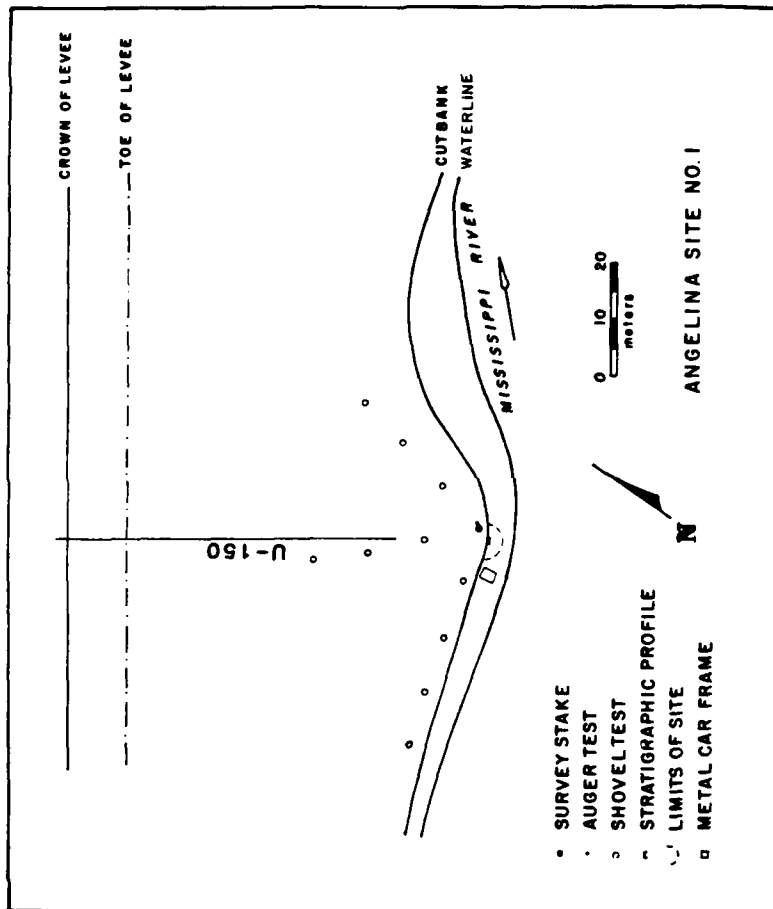
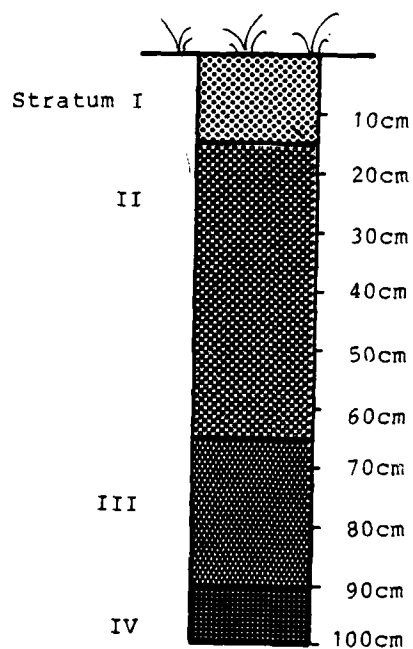


Figure 9. Site plan of 16 SJ 41.



Stratum I: Brown/dark brown (10 YR 4/3) silty  
clay humus zone with sand  
Stratum II: Yellowish brown (10 YR 5/4) clayey silt  
with fluvial lensing  
Stratum III: Yellowish brown (10 YR 5/4) silty clay  
with fluvial lensing  
Stratum IV: Dark gray (10 YR 4/1) clayey silt loam  
with fluvial lensing

Figure 10. Profile drawing of 16 SJ 41 auger test.

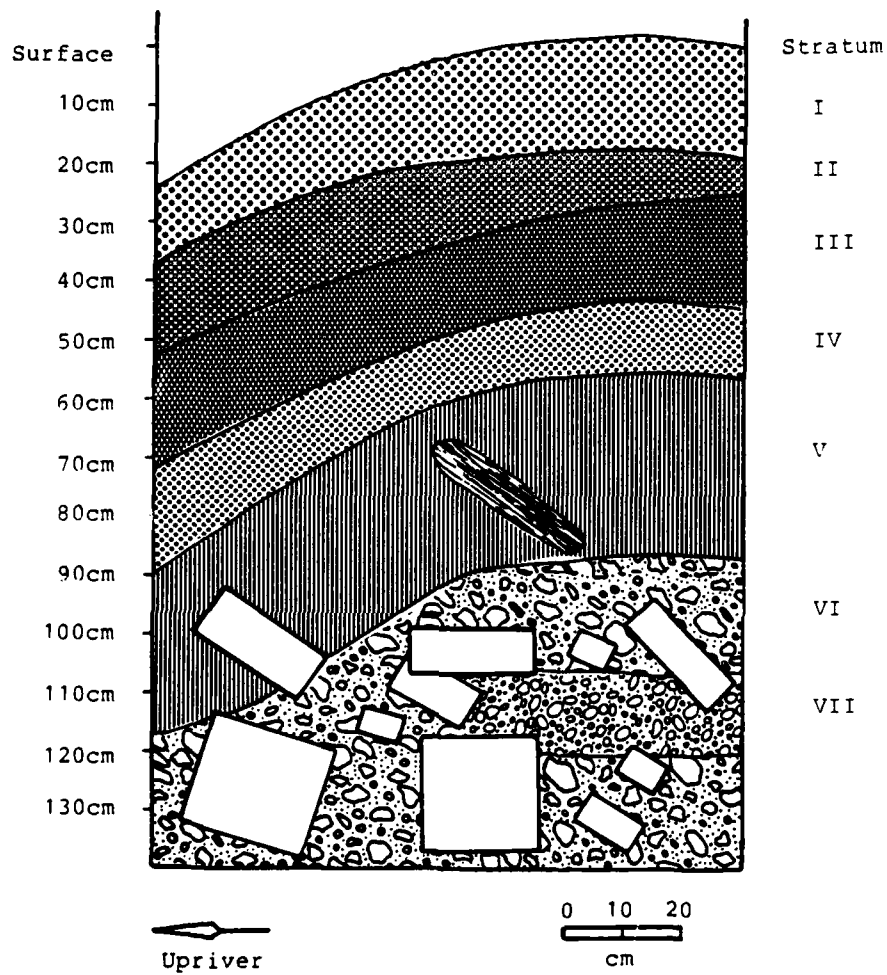


Figure 11. Profile drawing of 16 S<sup>+</sup> 41 cutbank.



Figure 11, Continued.

KEY

- Stratum I: Yellow brown (10 YR 5/4) sterile,  
laminated silty loam
- Stratum II: Dark grayish brown (10 YR 4/2) sterile  
clay
- Stratum III: Brown (10 YR 5/3) sterile silty clay  
loam
- Stratum IV: Yellowish brown (10 YR 5/4) sterile  
clayey silt
- Stratum V: Dark grayish brown (10 YR 4/2) sterile  
clay with wood fragments
- Stratum VI: Yellow brown (10 YR 5/4) silty clay with  
brick and mortar fragments
- Stratum VII: Black (7.5 YR 2/0) silty clay with high  
organic matter, brick rubble and mortar  
fragments

Angelina Site 2 (16 SJ 42) (Figures 12 and 13) is located about 250 m downriver from the Lutchter Ferry Landing. It extends about 80 m along the bankline. Here, a dense scatter of historic artifactual remains was present between the water line and the cutbank of the Mississippi River. Isolated bricks and cement slabs occurred along the cutbank and along the terrace immediately landward of the cutbank. A total of 16 shovel tests were placed along this terrace in an attempt to detect the presence of intact or buried cultural deposits (Figure 12). None were encountered, however. In addition, one auger test, excavated to a depth of 75 cm, was placed in this terrace; it revealed a series of culturally sterile overbank deposits (Figure 13). Because of the density of cultural remains present, a transect-based surface collection was conducted. Transects were aligned parallel to the bankline, and individual collection units measured 6 x 10 m. Subsequent laboratory analysis, however, did not reveal significant horizontal patterning of remains. As will be shown below, many of the ceramic and glass artifacts exhibited severe water abrasion, suggesting significant in situ weathering and/or downstream migration of artifacts.

Angelina Site 3 (16 SJ 43) (Figures 14 and 15) is located about 1.13 km downriver from the Lutchter Ferry Landing, atop a small bench and approximately 15 m from the present water line of the Mississippi River. The site consists of an extremely low density scatter of historic remains measuring about ten meters square (Figure 14). One hundred per cent of remains visible at the surface were collected. Ten shovel tests were placed at 10 m intervals along four rays originating at the center of the concentration. All shovel tests were devoid of cultural remains. One auger test (Figure 15) was excavated to a depth of 105 cm below surface near the center of the site. Stratum I was a dark grayish brown (10 YR 4/2) clayey silt between 0 and 20 cm below surface. Stratum II was a brown (10 YR 5/3) clayey silt loam from 20 to 95 cm below surface. Scattered fragments of crushed brick were present between about 40 and 60 cm below surface. The origin of these fragments is not known; however, they appear here to have been eroded and later incorporated into recent overbank deposits.

Angelina Site 4 (16 SJ 44) (Figures 16 and 17) is located approximately 1.43 km downriver from the Lutchter Ferry Landing at Range Marker U-95. Again, very sparse artifactual remains extended from the bankline to the first low bench of the river. This small scatter of historic remains measures about 10 x 30 m (Figure 16). One hundred per cent of the archeological remains visible at the surface were collected. Eight shovel tests were placed at 10 m intervals along four rays extending from the center of the site; they were devoid of cultural remains. One auger test also was placed near the site datum and excavated to a depth of 100 cm below surface (Figure 17). This test, which yielded a series of silty clay overbank deposits, was similarly devoid of cultural remains.

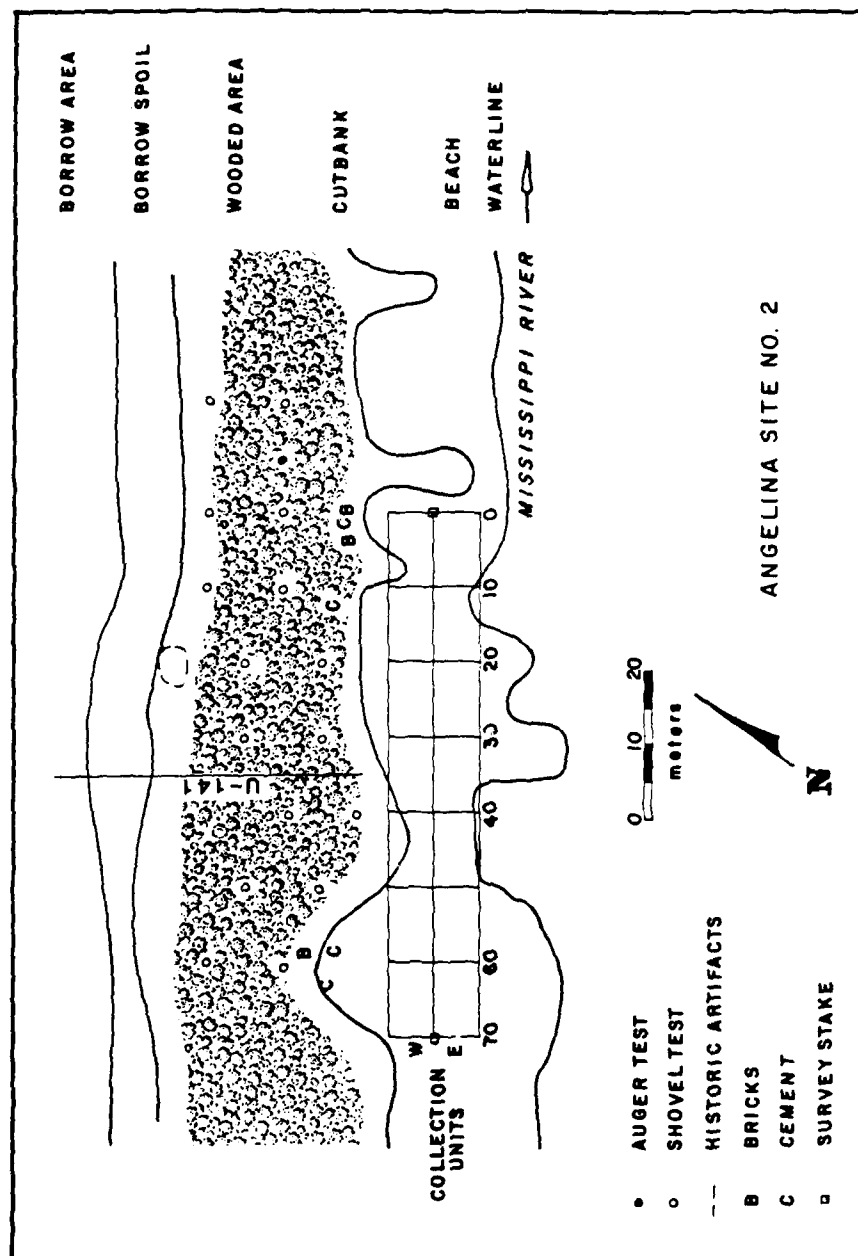
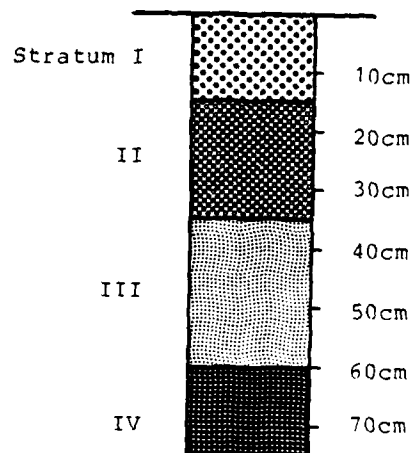


Figure 12. Site plan of 16 SJ 42.



Stratum I: Brown (10 YR 5/3) sandy silt  
 Stratum II: Light yellowish brown (10 YR 6/4) sandy silt  
 Stratum III: Very pale brown (10 YR 7/3) silt  
 Stratum IV: Gray (10 YR 5/1) clay

Figure 13. Profile drawing of 16 SJ 42 auger test.

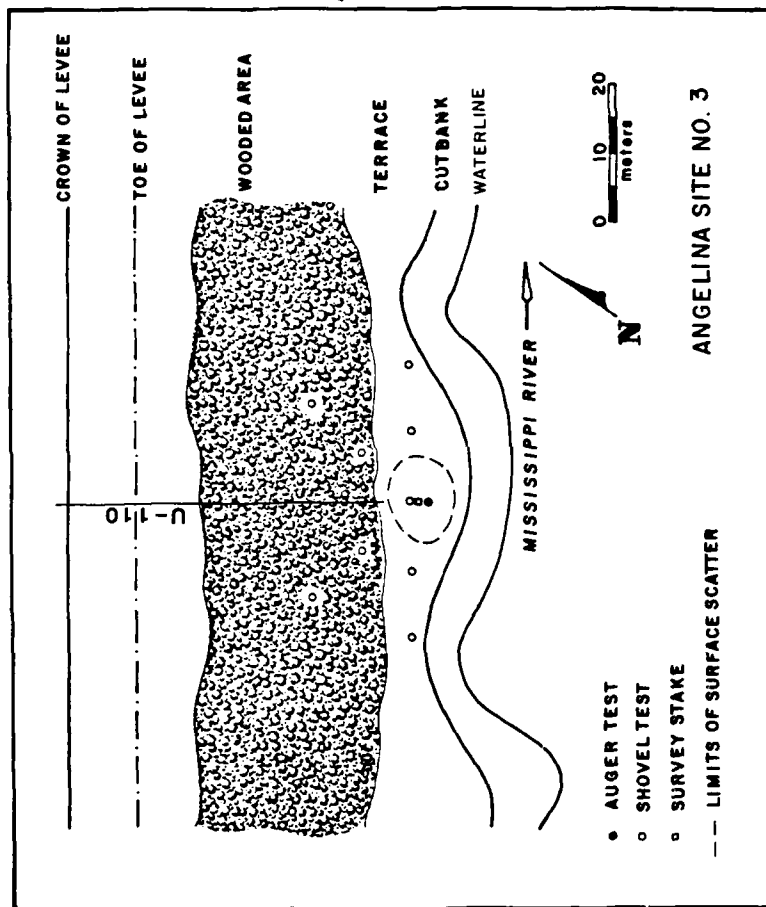
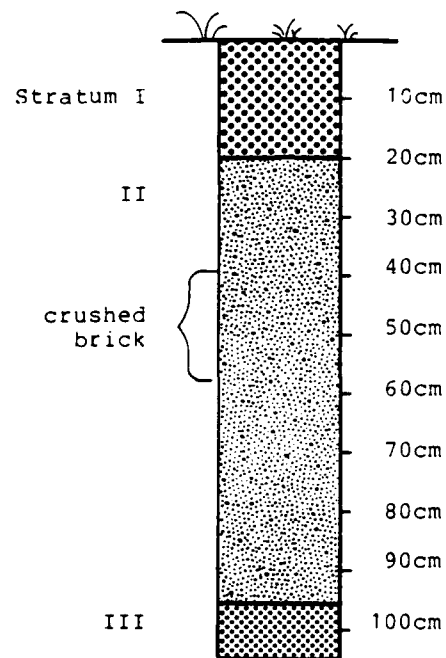


Figure 14. Site plan of 16 SJ 43.



Stratum I: Dark grayish brown (10 YR 4/2) clayey silt  
 Stratum II: Brown (10 YR 5/3) clayey silt loam  
 Stratum III: Dark grayish brown (10 YR 4/2)

Figure 15. Profile drawing of 16 SJ 43 auger test.

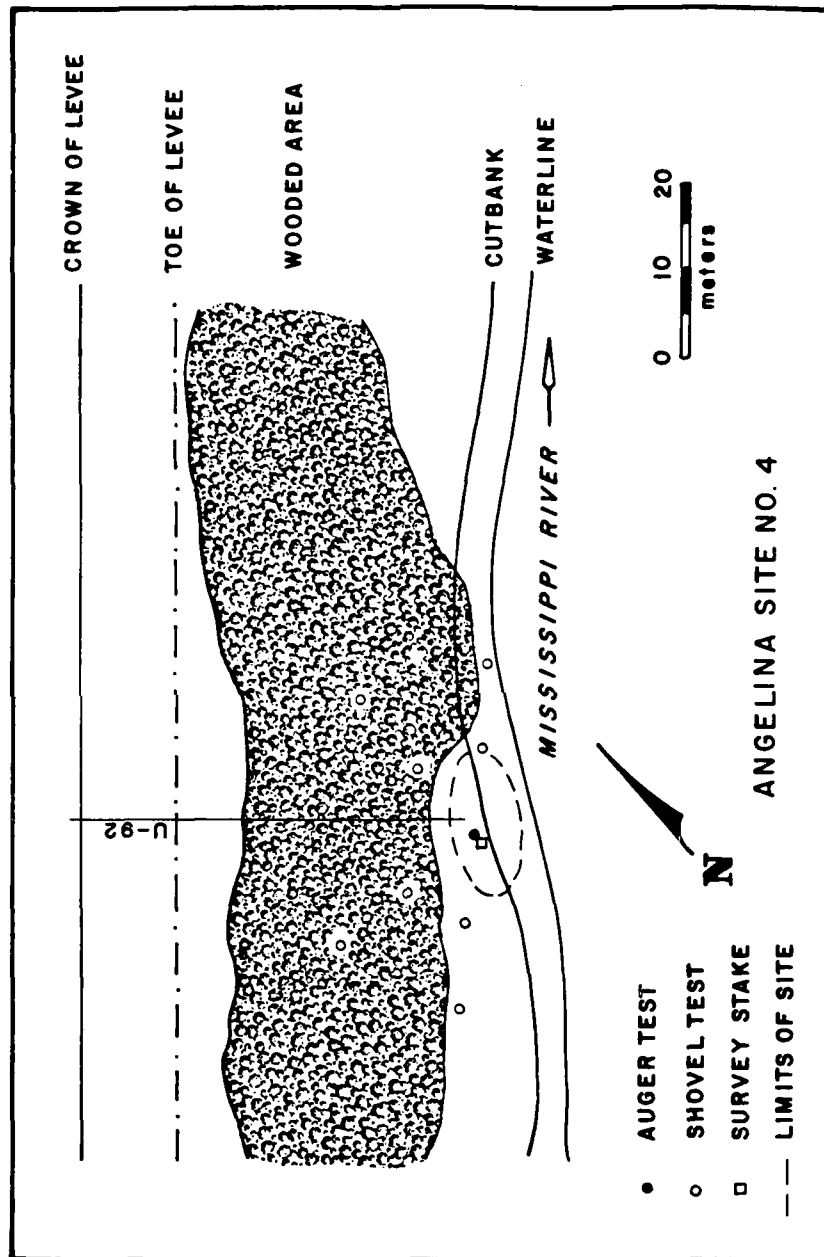
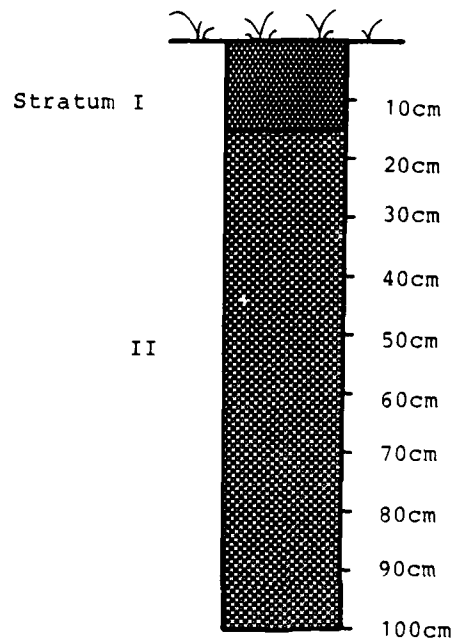


Figure 16. Site plan of 16 SJ 44.



Stratum I: Dark brown (10 YR 5/3) silty clay  
Stratum II: Grayish brown (10 YR 5/2) silty clay

Figure 17. Profile drawing of 16 SJ 44 auger test.



Angelina Site 5 (16 SJ 45) (Figures 18, 19, and 20) is located about 1.72 km downriver from the Lutchter Ferry Landing. Artifactual remains were present at the surface just riverward of recent spoil deposits and of a borrow area approximately 45 m from the present water line. The surface scatter was concentrated in an area of about 8 x 15 m (Figure 18). Ceramics, glass, metal, cinder, and miscellaneous modern refuse (plastic, rubber) occurred within and eroding from the spoil deposit. It appeared that the site previously had been collected; ceramics and glass artifacts were found sorted in several zones. These zones were collected, retrieving a sample of types from each area. A total of seven shovel tests were placed riverward of the spoil deposit, but they were devoid of cultural material. One stratigraphic profile was cleaned at the edge of the terrace riverward of the spoil deposit (Figure 19). Two lenses of cultural materials (Strata II and IV) were present between 40 and 60 cm below surface, interstratified between sterile clayey silt loams (Strata I, III, V, and VII). Strata II and IV contained charcoal and metal fragments; they appear to represent occupation debris discarded atop or reworked within the spoil bank deposit. One auger test, excavated to a depth of 100 cm below surface, was placed immediately riverward of the profile. One stratum, consisting of sterile clayey silt loam was present (Figure 19).

Angelina Sites 6, 7, and 8 (16 SJ 46, 16 SJ 47, 16 SJ 48) occur about 1 km upriver from the Lutchter Ferry landing (Figures 21, 22, and 23). All occupy similar positions along the bankline of the Mississippi River, and they are of roughly equivalent dimensions, about 30 x 30 m. Each site was a small surface scatter of historic artifacts; one hundred percent of the surface materials were collected. Shovel tests were placed at 10 m intervals along rays originating from the site datum, near the center of each concentration. Like the other sites recorded within the Angelina project area, subsurface shovel testing yielded negative results; no intact cultural deposits were observed or recorded. One auger test, excavated to 100 cm below surface, was placed at each site (Figures 24, 25, and 26). Again, these tests revealed a series of culturally sterile overbank deposits.

### Conclusions

Field investigations within the Angelina project area consisted of an intensive pedestrian survey and subsurface shovel testing program. As a result of this initial survey, a total of eight sites were identified and recorded. These sites are located at or near the bankline of the Mississippi River; they consist

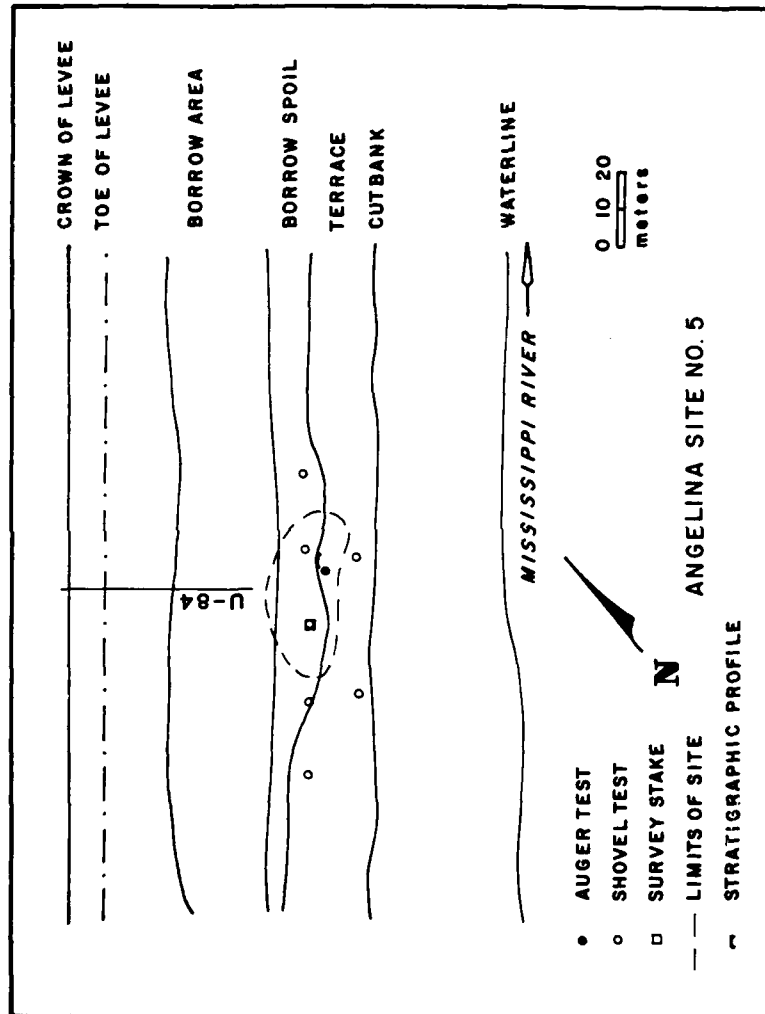
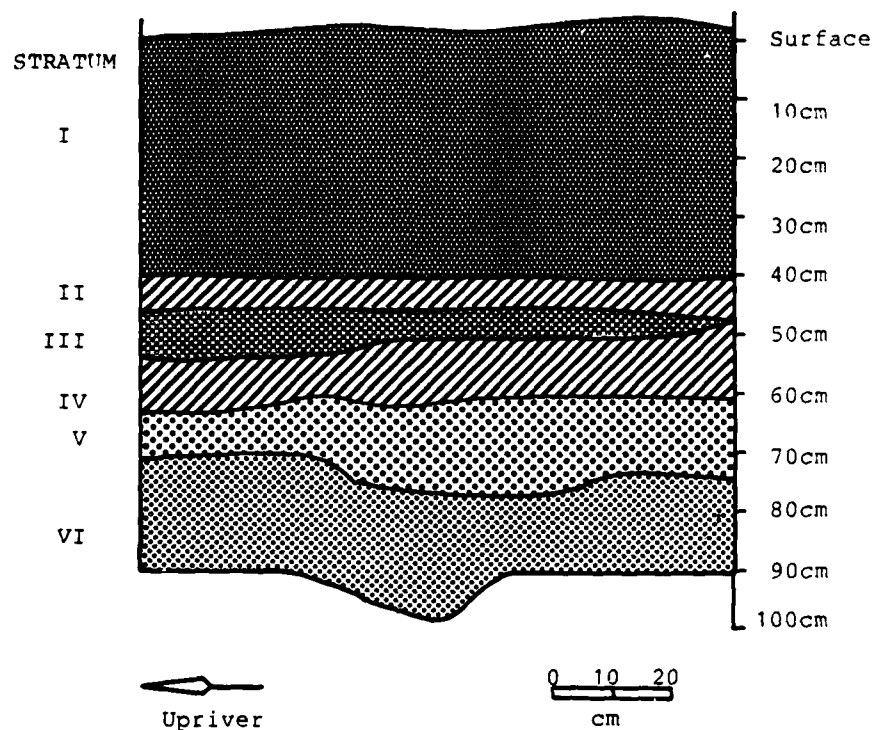
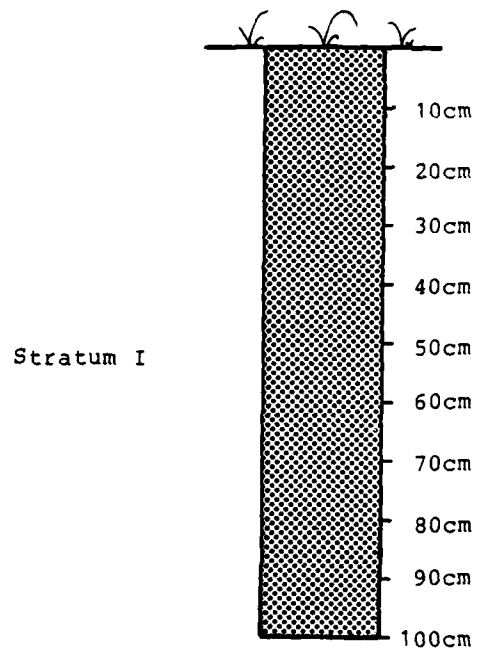


Figure 18. Site plan of 16 SJ 45.



- Stratum I: Brown/dark brown (10 YR 4/3) clayey silt loam
- Stratum II: Very dark grayish brown (10 YR 3/2) matrix with charcoal and metal fragments
- Stratum III: Brown/dark brown (10 YR 4/3) silt loam lens
- Stratum IV: Very dark grayish brown (10 YR 3/2) matrix with charcoal and metal fragments
- Stratum V: Dark yellowish brown (10 YR 4/4) clayey silt loam
- Stratum VI: Dark yellowish brown (10 YR 3/4) clayey silt loam

Figure 19. Profile drawing of 16 SJ 45 cutbank.



Stratum I: Brown/dark brown (10 YR 4/3) clayey  
silt loam

Figure 20. Profile drawing of 16 SJ 45 auger test.

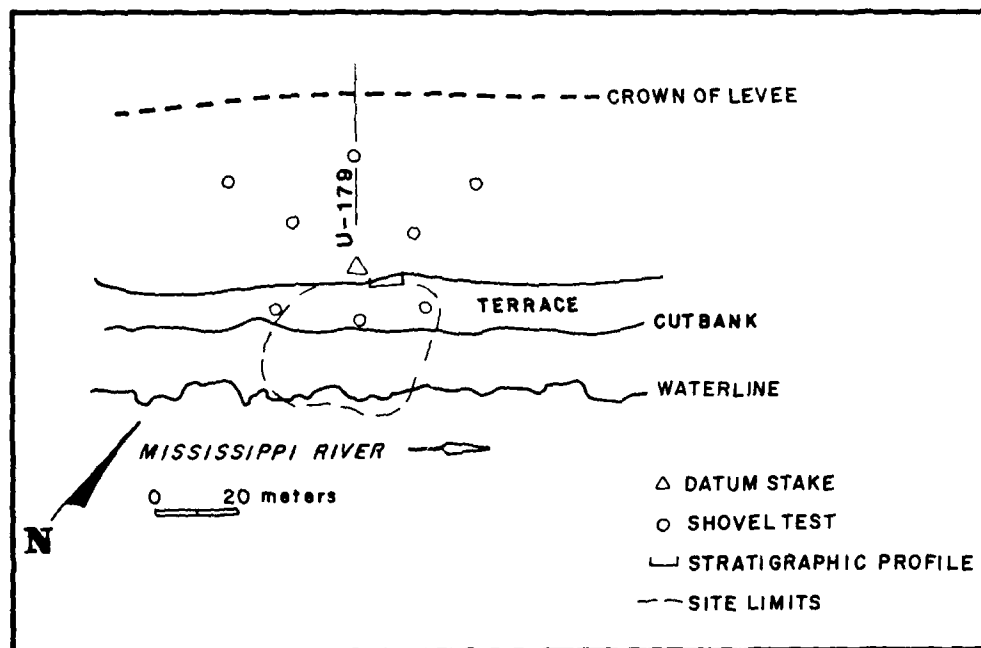


Figure 21. Site plan of 16 SJ 46.

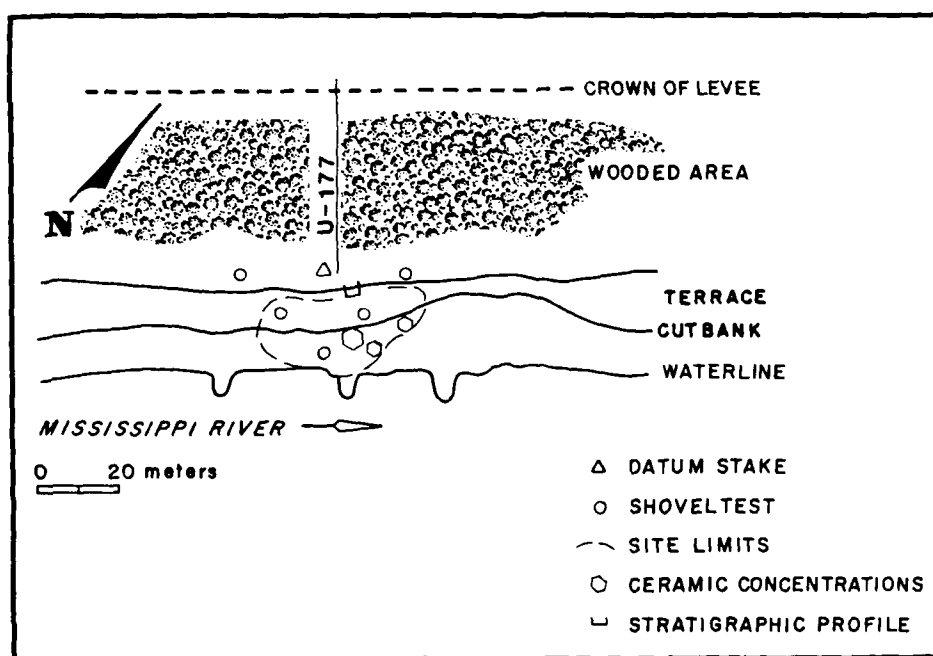


Figure 22. Site plan of 16 SJ 47.

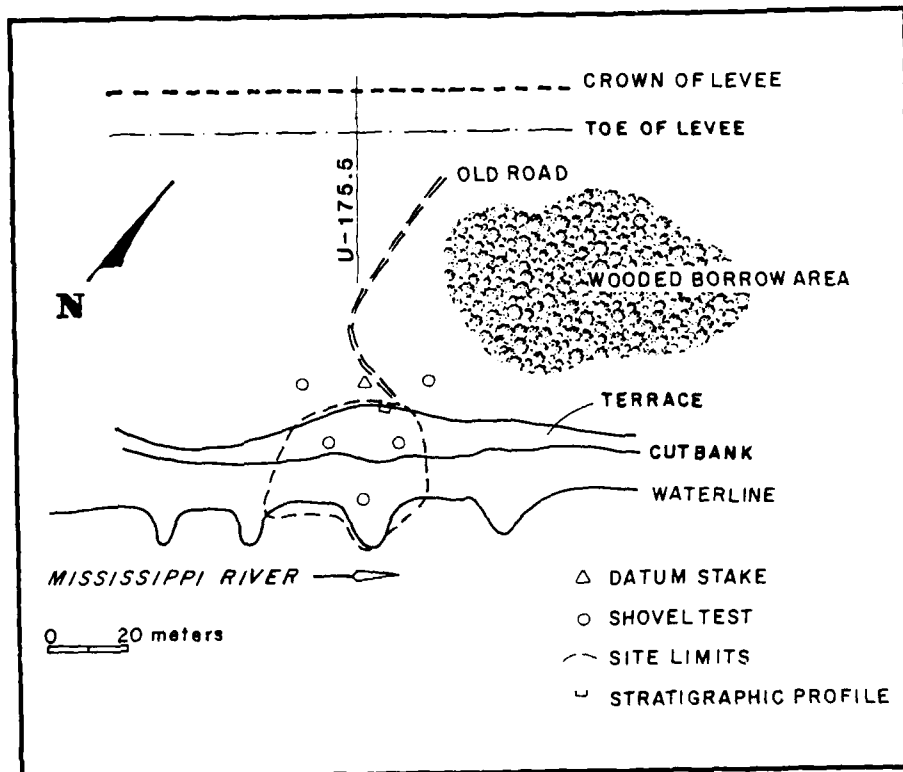


Figure 23. Site plan of 16 SJ 48.

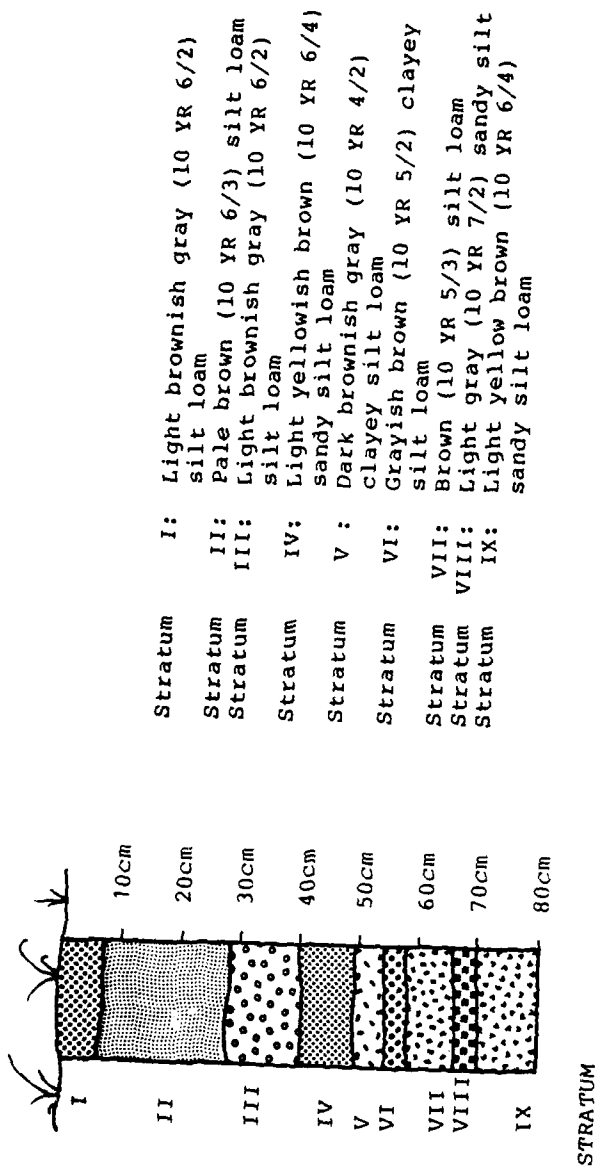


Figure 24. Profile drawing of 16 SJ 46 auger test.



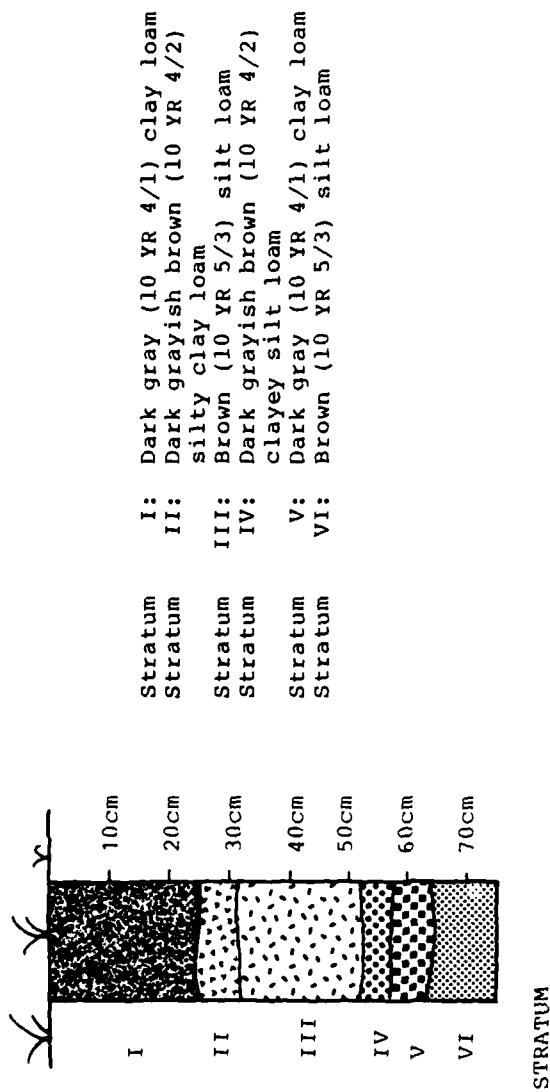


Figure 25. Profile drawing of 16 SJ 47 auger test.

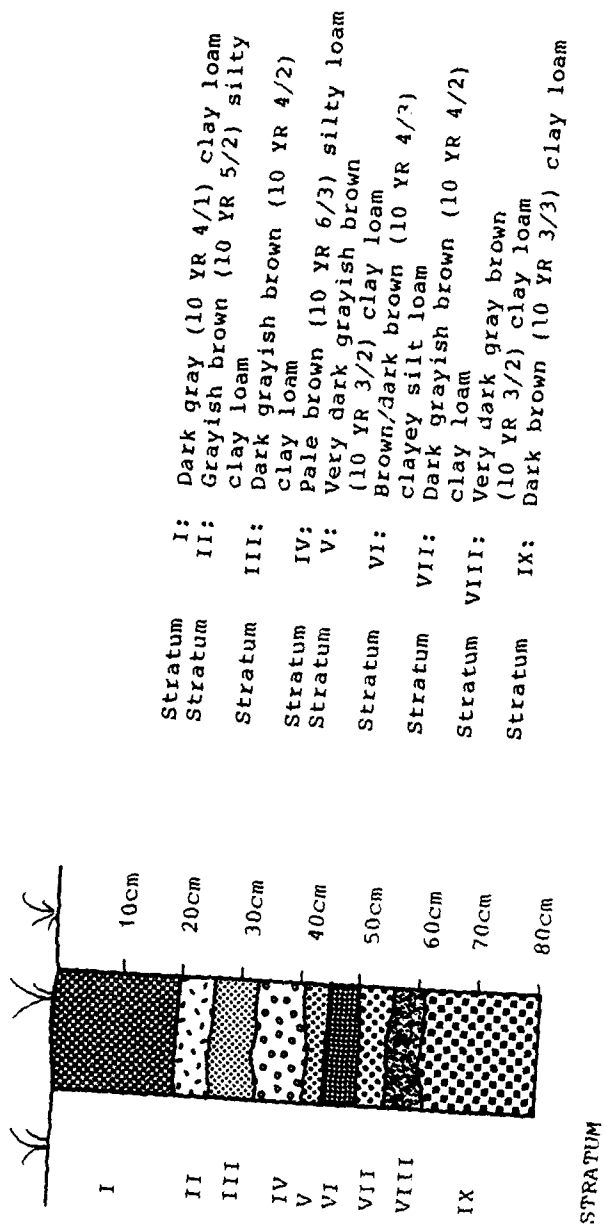


Figure 26. Profile drawing of 16 SJ 48 auger test.

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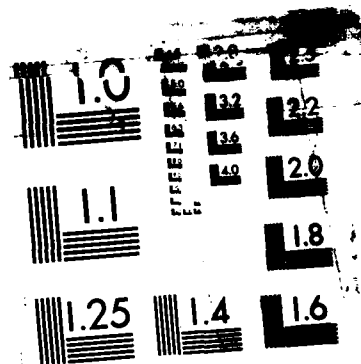
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almost entirely of surface material dating from the historic period. Generally, artifact assemblages are extremely small and many of the remains exhibit evidence of intensive water rolling.

Subsurface shovel and auger testing at each site failed to reveal the presence of intact cultural deposits. Stratigraphic profiles were cleaned at two sites (16 SJ 41 and 16 SJ 45) where artifactual remains were observed within exposed sections along the batture. In the case of 16 SJ 41, artifacts were found within slumped overbank deposits, which had accumulated at the base of a low bench. In the case of 16 SJ 45, intermixed historic and modern refuse occurred within a recent spoil bank. Thus, none of the sites recorded within the Angelina project area possessed contextual integrity.

Clearly, the condition of cultural resources identified during this survey is in large part the product of erosive power of the Mississippi River. Lateral migration of the river has virtually destroyed the contextual integrity of these resources, which were found eroded and deflated onto the bankline of the river. However, much of the Mississippi River batture away from the bankline is blanketed by extensive overbank deposits. Should cultural resources have survived the excavation of borrow areas, it is unlikely that subsurface examination involving shallow shovel testing would have succeeded in identifying these resources. Furthermore, the historic map data suggests that many structural remains and associated cultural deposits may presently occur beneath artificial protection levees, which similarly would not have been detected during this survey effort.

## CHAPTER VII

### ARTIFACT ANALYSIS

#### Introduction

Laboratory analyses of historic archeological remains from Angelina were designed to augment archival research, historical research, and field observations in evaluation of the recorded sites according to National Register of Historic Places criteria. In particular, laboratory analyses focused on chronological and functional parameters of site occupation, and on evaluation of the contextual integrity of remains recovered by subsurface testing.

Artifacts were washed, and they were separated according to type. Ceramics and glass were described using formal archeological classification. Metal and miscellaneous artifacts were identified and described whenever their condition permitted; these classes of artifacts received less formal classificatory attention than did the more time-sensitive artifact classes of ceramics and glass. Ceramics assemblages were dated using the Mean Ceramic Dating method (South 1977), as modified by Goodwin, Yakubik, and Gendel (1984). Artifact assemblages from each site were classified on the basis of function in an effort to discern the functional nature of each site. This classification was adapted from South's (1977:95-96) classification defining the Carolina Artifact Pattern.

#### Ceramic Artifacts

Primarily nineteenth and twentieth century artifacts were recovered by the field survey at Angelina. Although archeological classification of eighteenth century ceramics is fairly coherent and well developed (Noel Hume 1970), there is no comprehensive typology of nineteenth century ceramics. South (1974) presented a taxonomy of nineteenth century ceramic types; however, South's taxonomy is not especially sensitive either to technological developments or to relationships between certain nineteenth century types. Miller (1980) suggests that classification of nineteenth century ceramics should be based on decorative type and on form. However, this method obscures or ignores both variability in paste and important chronological information. Recently, Worthy (1982) suggested that classification and interpretation of late nineteenth and early twentieth century ceramics should integrate technology, form, function and decoration (Worthy 1982:329). However, in collections with a high percentage of small sherds unidentifiable as to former function and form, this approach is not practical.

Because of the need for a comprehensive yet flexible formal classification of nineteenth and twentieth century Anglo American ceramics, the discussion following presents a formal classificatory description of the ceramics from Angelina. The approach used here is a paradigmatic classification (Dunnell 1971:84) that is the product of the combination of unweighted classes of paste, glaze, and of decorative type (Yakubik 1980). This method provides more complete definition of ceramic types than now exists; it facilitates the handling of ambiguous and transitional ceramic types; and, it provides information concerning both chronology and social stratification. This approach has proven useful with collections from both rural and urban sites in South Louisiana (Goodwin and Yakubik 1982a; Goodwin, Yakubik and Goodwin 1983; Goodwin, Gendel and Yakubik 1983a; Goodwin, Yakubik and Gendel 1983; Yakubik 1983). In the discussion following, ceramic artifacts have been divided into groups by paste. Glaze and decorative techniques then are examined for each paste group. Ceramic artifacts from Angelina are listed by site in Table 12.

### **Cream Colored Earthenware**

A cream colored earthenware ceramic body was perfected by Josiah Wedgwood and Thomas Whieldon in 1759. Creamware, a type of cream colored earthenware, was perfected by Wedgwood ca. 1762. This development contributed to England's increasing control of the world ceramic tableware market (Miller 1980). Creamware consists of a refined, thin, cream colored earthenware body with a clear lead glaze tinted with copper oxide. Creamware was popular through the end of the eighteenth century and into the first two decades of the nineteenth century. It was imported to the American colonies at least as early as the late 1760s.

Although several different decorative techniques, such as mocha, annular decoration and overglazed hand-painting, were applied to creamware, it frequently was left undecorated. One undecorated creamware sherd was recovered from 16 SJ 41. One sherd of creamware from 16 SJ 44 had annular decoration, which consists of bright horizontal bands of colored slip. Mocha decoration, which consists of brown, fern-like devices on the vessel that were produced from a mixture of tobacco juice and urine (Noel Hume 1970:131), was found on one sherd from 16 SJ 41.

By 1779, Wedgwood developed pearlware from creamware. Although pearlware differs from creamware in the amount of flint in the paste (Noel Hume 1969:390; 1970:128), the bodies of pearlware and of creamware are virtually identical. The major distinction between these two types is their glazes (Noel Hume 1969:395). The

Table 12. Ceramic Artifacts Recovered from Angelina.

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
<b>CREAM COLORED EARTHENWARE</b>									
Creamware									
Annular creamware	1								
Pearlware				1					1
Blue hand-printed pearlware		1	1						1
Blue transfer-printed pearlware						1			1
Finger-painted pearlware		1							
Blue shell-edged pearlware		1	1				1	1	3
Green shell-edged pearlware		1	1				1		3
						1	1		2
									4
<b>WHITE COLORED EARTHENWARE</b>									
Whiteware/ironstone									
Blue shell-edged whiteware/ironstone	1	14	2	1	9	2		1	30
Blue transfer-printed whiteware/ironstone				1					1
Flow blue whiteware/ironstone		2							2
Annular whiteware/ironstone		1							1
Ironstone				1					1
Flow blue ironstone		59		2	4	1	2	1	69
Decaled ironstone		4							4
Blue transfer-printed ironstone		2			2				4
							2		2



Table 12, continued.

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Black transfer-printed ironstone		1							1
Red transfer-printed ironstone		1							1
Grey transfer-printed ironstone								2	2
Overglaze painted ironstone					1				1
Green transfer-painted ironstone		1							1
Ironstone, brown glazed exterior		1							1
RED COLORED EARTHENWARE									
Unglazed redware (flower pot)		3							3
Salt glazed redware, albany slip interior		1							1
YELLOW COLORED EARTHENWARE									
Brownware		4			1				5
Brownware jug					1				1
Brownware, white exterior engobe		1							1
Brownware, buff exterior engobe		2			1				3
Brownware, buff engobe		1							1
Late spatter		8							8
Yellowware		1							1

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Mocha yellowware		1							1
Yellowware, tortoiseshell glaze		1							1
Buff opaque glazed yellowware					1				1
blue hand-painted bands								1	2
Rockinghamware		1							3
English majolica		3							3
STONEWARE									
Grey salt glazed stoneware, albany slip interior		1							1
Brown stoneware, albany slip interior and exterior		1							1
PORCELANEOUS STONEWARE									
Porcelaneous stoneware		6							6
PORCELAIN									
Porcelain		1	10		2				13
Decaled porcelain			1						1
Burnt ceramics			1						1
TOTAL	3	138	5	6	22	4	9	6	193

pearlware glaze is tinted with cobalt oxide, and it pools blue in crevices. While the copper tinted glaze of creamware gives a yellowish appearance, cobalt has the effect of whitening pearlware. Like creamware, pearlware was popular through the first two decades of the nineteenth century.

Unlike creamware, pearlware usually was decorated. Annular decoration was common on pearlware bowls and mugs. Shell-edged pearlware, or pearlware decorated with feathery inward brush strokes in blue or green, also were popular. Zones of swirled colored slips, usually combined with annular decoration, produced a decorative type known as "finger-painting." Hand-painting, in both monochrome and polychrome colors, also was popular. Earlier examples of this latter type (ca. 1795-1815) utilized softer pastels; later examples (ca. 1815-1835) utilized directly stenciled floral patterns and bright colors (Noel Hume 1970:129).

Most frequently, pearlware received transfer-printed decoration, usually in blue. Earlier examples of blue transfer-printed pearlware have a grey cast, while later examples utilize a blue with a purple tone. The very latest examples, and especially the blue transfer-printing found on white colored earthenwares (see below), used lighter "washed out" looking shades. Often, transfer-printed pearlware sherds can be identified by rim pattern even if no maker's mark is recovered. Although plate patterns were widely copied, rim patterns for the most part are diagnostic (Camehl 1916). All of the above types were represented in the Angelina collections.

#### **White Colored Earthenware**

White colored earthenware resulted from the introduction of small amounts of cobalt to the ceramic paste, a development that had occurred by the early nineteenth century. Over time, the body of these ceramic vessels became thicker and coarser, and the net result of these changes distinguishes white colored earthenware from cream colored earthenware. During the first quarter of the nineteenth century, this white colored earthenware often was covered with the cobalt-tinted glaze typical of pearlware (Sussman 1977:105-106). Also found during this time period are cream colored earthenwares with very lightly tinted pearlware glazes, and white colored earthenwares with a copper tinted creamware glaze. Decorative techniques and motifs typical of pearlware were used on these transitional types. Rims embossed with garlands, leaf-like motifs, beads, and a variety of other patterns and painted over in green or blue also are common after 1800. One sherd of undecorated white colored earthenware with a pearlware glaze was recovered from 16 SJ 43.

The use of copper and cobalt additives in glazes gradually was reduced, and at the end of the first quarter of the nineteenth century a ceramic type with a white colored earthenware body and with a transparent alkaline glaze appeared. This type commonly is called whiteware. A similar ceramic type developed in the mid-nineteenth century in England and in the United States has been called ironstone, stone china, or granite ware. It also has a refined white colored earthenware body (this should not be confused with Mason's patented Ironstone China of 1813). While Worthy (1982:335-337) classifies ironstone as a white stoneware, she also states that it is "almost vitreous," which precludes it being a true stoneware because stonewares by definition are vitrified. Worthy (1982) is correct in stating that late ironstones are easily distinguishable from whitewares. However, distinctions at mid-nineteenth century are less clear. Although some practitioners (Noel Hume 1970:130; South 1977:211) distinguish ironstone from whiteware, and while it seems likely that there are sufficient differences between these types in terms of body composition, body permeability, body thickness, decoration, and color to warrant their segregation, it also is clear that these differences are poorly understood at the present time. As with pearlware and whiteware, the differences between whiteware and ironstone form a continuum rather than constituting distinct types after the time of ironstone's introduction. There is little agreement in the literature on the criteria that distinguish these types. Other authors have used a unicameral classification for them (South 1974; Nicholson 1979; Lees 1980). Barber (1902:19) states that the ceramic formula of ironstone is similar to that used in all white wares, e.g., flint, feldspar, kaolin, and ball clay. Therefore, the single classificatory unit of whiteware/ironstone was used in this study for the purpose of classifying intermediate and/or indeterminate types.

Whiteware/ironstone has continued in production throughout the twentieth century. Although it frequently was undecorated, as in the case of pearlware, the most common decorative technique was transfer-printing. Scenic designs, both natural and romanticized, were popular until the 1850s, when undecorated ironstone came into fashion. During the later nineteenth century, floral designs were the most common transfer-printed motif on both whiteware and ironstone (Wakefield 1970:35). A variation on transfer-printed decoration is called "flow blue." The print is deliberately blurred by a chlorinated vapor introduced into the kiln (Ray 1974:69). The technique was developed accidentally by the Wedgwood factory ca. 1830, and it is commonly found on whiteware and ironstone until ca. 1880. Embossed blue and green and shell-edged rims are common through the 1830s, and are represented in this sample. Other decorative techniques that appear on whiteware/ironstone include annular decoration and hand-painted decoration. Examples of all of the

above are represented in the Angelina collections.

Ironstone, as stated above, should not be confused with Mason's patented Ironstone, which was developed in 1813. Rather, the ironstone under consideration here was developed in England ca. 1850 and it was produced at a slightly later date in the United States. Although it often is very similar in appearance to whiteware, it is helpful for chronological purposes to isolate as many true ironstone sherds as possible. Ironstone is defined as having a hard, white, often thick ceramic body. It is not completely vitrified, but it is more vitrified than whiteware. The fractures are even and smooth. The surface of the vessels are hard and smooth, usually covered with a bluish-grey tinted glaze which often is opaque-looking in appearance.

The vast majority of ironstone from Angelina sites was undecorated, or decorated with molded relief patterns. Late nineteenth and twentieth century ironstone tended to be undecorated or simply molded into oblong patterns, raised barley or wheat sheaf motifs and, infrequently, raised flowers. Undecorated ironstone was meant for durable tableware use, and remained in production until ca. 1940 (Goodwin, Yakubik, and Gendel 1984). Decorative techniques found on the ironstone from the Angelina collections included transfer-printing, flow blue, hand-painting, and decalcomania (Goodwin, Yakubik, and Gendel 1984).

### **Red Colored Earthenware**

Red colored earthenware has a distinctive paste color ranging from a deep red-brown to orange and to pink, due to the presence of iron compounds in the clay. Color varies with the amount of impurities in the clay and with the firing temperature. Fired at low temperatures, the body is usually light and porous. Complete vitrification cannot be achieved with pure earthenware clays. As a result, red colored earthenware tends to be more fragile than stonewares or porcelains (Rhodes 1973:47).

Because of the ready availability of red-colored earthenware clays in most areas and due to its ability to be fired at low temperatures (earthenware becomes hardfired between about 950-1100 degrees C, viz Rhodes 1973:22), redware for utilitarian use was produced commercially in many regions of the United States from the mid-eighteenth century onwards. Consequently, this type is relatively undiagnostic for dating purposes. Early in the colonization of Louisiana, it was noticed that the local clays were suitable for pottery manufacture. Bricks were manufactured on the Tchoupitoulas Coast of present day Jefferson Parish as early as the 1720s, and it is likely that redware ceramics were manufactured

elsewhere in Louisiana at a relatively early date, as well. These coarse, utilitarian, locally-produced, wheel-thrown vessels may have been the ceramics that were most readily available to the early colonists in the period prior to the wholesale importation of mass-produced British ceramics. Seriation of the ceramic subassemblage from Elmwood Plantation supports this hypothesis (Goodwin, Yakubik and Goodwin 1984). Redware continued to be produced throughout the nineteenth century for utilitarian purposes.

Since the ceramic is porous, it usually received a glaze on one or both surfaces to render it impermeable to liquids. Unglazed redware also is common, though, and three sherds of an unglazed flowerpot were found at 16 SJ 42. One sherd of an unusual redware type also was recovered from 16 SJ 42. This had a red earthenware body, and it had an albany slip interior. The exterior was covered with a salt glaze, typically found on stoneware (see below). Salt glazed redware was produced in the South between 1825-1850 (Ramsey 1947:128). The addition of the Albany slip interior to this type was utilized primarily in Ohio between 1850 and 1880 (Ramsey 1947:131), but the type has been found in late nineteenth century contexts at Algiers Point (Goodwin, Yakubik and Gendel 1984).

### **Yellow Colored Earthenware**

Yellow colored earthenware is a coarse American ceramic body type. In fact, the body consists of stoneware and not earthenware clays, but it is considered an earthenware since it is not fired to vitrification. The bodies range from low-fired pieces which are soft and quite porous, to high-fired, almost vitrified pieces. The body color ranges from buff to brown-yellow, varying with the type and amounts of impurities in the clays and with firing temperature.

Surface treatments on yellow colored earthenware varied with function. Yellow colored earthenware was molded into thick, heavy utilitarian shapes, such as mixing bowls. It was covered with a clear glaze. This type commonly is called yellowware. Yellowware in general either was undecorated or it was decorated with annular or mocha decoration. Both types are represented in the 16SJ42 collection. One yellowware sherd had a multi colored tortoiseshell glaze. Yellowware was produced between 1830 and 1900 (Ramsey 1947:148); the mocha and annular variants were manufactured from 1840 to 1900.

Yellow colored earthenware also was covered by a dense, matte brown to black slip glaze known as an Albany slip. Also known as "brownware," this type was produced between 1830 and 1900 (Ramsey

1947:144). This variant most frequently was used for straight-sided crocks, jugs and storage jars. It generally was wheel thrown. Brownware also is found covered with white, buff or brown engobes and slip glazes; it also was left unglazed. The latter type was produced between 1840 and 1875 (Ramsey 1947:144).

An opaque, mottled brown glaze produced by the inclusion of manganese oxide in the glaze also was found on yellow colored earthenware sherds. This type, known as rockinghamware, was produced between 1830 and 1900, and it generally was molded into tableware or decorative pieces (Ramsey 1947:147). The final variant of yellow colored earthenware was late spatter. Also known as "late sponge," it was produced at the very end of the nineteenth century and during the early twentieth century. It was used for utilitarian pieces. Late spatter consisted of blue sponged decoration on an opaque white ground or an opaque light blue ground (Ray 1974:114). All the above yellow colored earthenware types were recovered from Angelina.

A similar coarse, cream to buff colored earthenware body covered with brightly colored opaque or semi-transparent glazes is known as majolica, or English majolica. Introduced by Minton of Stoke-on-Trent at the "Great Exhibition" in 1851, it later was manufactured by Wedgwood and by George Jones and Sons potteries in England, as well as at a number of American potteries. The glazes generally obscured the coarse ceramic bodies, which usually were molded into fanciful shapes. Three sherds of this type were recovered from 16 SJ 42.

## **Stoneware**

Stoneware bodies range in color from a white-gray or buff to deep gray or brown, depending upon the type and quantity of impurities in the clay and on the firing temperature. Fired between 1200-1300 degrees, stoneware is smooth and stoney in appearance (Rhodes 1973:22). Stoneware first was manufactured commercially in the United States ca. 1775; after 1800, domestically-produced stoneware became very popular for utilitarian use. American stoneware generally was wheel-thrown into thick and heavy utilitarian shapes. The most common and the most attractive surface treatment of stoneware is salt glazing. Salt glazing is accomplished by placing the raw ceramic body in the kiln, and raising the kiln temperature until the clay matures, at which time salt is placed in the kiln firebox. The salt vaporizes and deposits on the ware (Rhodes 1973:285). The resulting glaze is thin and has an "orange peel-like" texture. Most clays can be salt glazed successfully; as noted previously, salt glaze occasionally is found on redwares. When firing was undertaken at very low temperatures, borax was added to the salt, reducing the

"orange peel" texture (Rhodes 1973:286). Salt glazed stoneware frequently was undecorated, or decorated with underglaze blue hand painting utilizing cobalt oxide. Since the salt vapors rarely reach the interior of the vessel, an Albany slip, developed ca. 1810, frequently was utilized on the interior of American made stonewares. Although other slip glazes were utilized for this purpose, the combination of salt glaze with an Albany slip is most common on nineteenth century stoneware and particularly on the gray varieties. Both grey and brown saltglazed Stoneware were recovered from 16 SJ 42.

### **Porcelaneous Stoneware**

"Porcelaneous stoneware" as a classificatory unit recently was introduced by Worthy (1982). This terminology is particularly descriptive of a type of ware that combines the traits of both porcelain and stoneware. Historically, this type has been known both as "semi-porcelain" and as "hotel ware." It is heavy, white, opaque, and completely vitrified. It contains both kaolin and ball clay, and fires between 1200-1400 degrees (Worthy 1982:337). This type, developed in the United States after 1880 for table use, commonly was used in restaurants and for other institutional purposes because of its durability. A variety of decorations were applied to porcelaneous stoneware; however, the ware most frequently was left undecorated or it was decorated only with a single, monochrome band on the rim. Porcelaneous stoneware is still in use today. Six sherds of this type were recovered from 16 SJ 42.

### **Porcelain**

Hard paste porcelain and soft paste porcelain will be discussed together because of the frequent confusion between the two pastes. Hard paste porcelain first was produced by the Chinese in the eighth century, and over time Oriental porcelain came into such great demand that by the eighteenth century Chinese potters were producing porcelain solely for export. Canton porcelain, exported to the United States in large quantities during the first three decades of the nineteenth century, has a green-gray surface appearance, with sloppily executed blue handpainted designs.

As a result of many Western attempts to copy the Oriental ware, soft paste porcelain was developed. The lack of technical expertise and of sufficiently plastic kaolin sources hindered production of hard paste porcelains in England and France during the eighteenth century. Soft paste differed from hard paste porcelain in the use of a number of fluxing agents, such as frit



(ground glass), which lowered the firing temperature of the clay. In 1800, Joseph Spode formulated a soft paste porcelain from kaolin and bone ash. Still produced today, it is commonly referred to as bone china. Soft paste ranges in color from white to pale buff. The body is completely vitrified, but the paste is somewhat granular in texture. In cross section, there is a clear division between paste and the glaze. It is often less translucent than hard paste.

In 1709, a German at Dresden (Meissen) named Bottger produced the first western hard paste porcelain (Wynter 1971:33), and several German factories produced true hard paste porcelains during the eighteenth century (Miller and Stone 1970:90). A few English and French potteries were producing hard paste porcelain between 1768-1770 (Wynter 1971:170-174), and several Parisian factories began producing hard paste during the same time period (Wynter 1971:110-115). Many French and English factories, such as Limoges and Sevres in France, and W. T. Copeland and Sons, and Minton, both at Stoke-on-Trent in England (Kovel and Kovel 1953:171-178), acquired the expertise to produce true hard paste porcelains during the nineteenth century. The French potteries, in particular, exported large quantities of porcelain to the American market during the second half of the nineteenth century. The popularity of French porcelains in America was largely the result of the efforts of the Haviland family, and their factory at Limoges produced porcelain specifically for the American market (Ray 1974:86-87; 118-120). Relatively inexpensive undecorated porcelains also were manufactured in France for the American table; these provided competition for English and American undecorated ironstones. The first commercially successful hard paste porcelains made in the United States were not produced until ca. 1880 (Ramsey 1947:156).

Hard paste porcelain is very white, vitrified, and translucent. Made from kaolin and petunse (feldspar - potassium aluminum silicate), it is fired at a high temperature (1300-1450 degrees) and approaches glass in composition. The hard paste porcelain body has a tendency to fuse with the transparent feldspathic glaze due to the high firing temperature. Fractures are smooth and glass-like, unlike fractures of soft paste porcelains. Barber (1902:20) suggests that distinctions between American manufactured hard and soft paste porcelains may be "arbitrary" and the two form a continuum "since the degrees of differences are often so slight that it is impossible to determine where soft paste porcelain commences and hard paste ends." Only undecorated and decaled porcelain sherds were found at Angelina.

## Glass Artifacts

At the end of the eighteenth century, the majority of glassware was blown, and the resultant product was referred to alternately as free blown, hand-blown, or as off-hand-blown glass (Lorraine 1968:35). This glassware is characterized by an asymmetrical shape and by the lack of mold seams. As an alternative to free-blown glass, bottles also could be blown into a one piece dip-mold, which shaped the body of the piece, while the shoulders, neck, and lip of the vessel were hand finished, and thus tended to be asymmetrical. Both free-blown and dip-molded bottles had to be held by some method while the bottle was finished; this was accomplished using a pontil. While the bottle was still attached to the blow pipe, the pontil rod was attached to the base with molten glass. The bottle then was struck off the blow pipe, and the lip and neck of the vessel were finished. When the pontil rod was removed, it left a pontil scar on the base. There are basically three different types of pontil scars. The first, the rough pontil, is characterized by bits of broken glass adhering to the base from where the glass-tipped pontil was broken off. The second pontil scar type is from a blow pipe pontil; it is characterized by a rough ring of glass on the bottle base. This results from using the blow pipe as the pontil rod. When the bottle is removed from the blow pipe, a ring-shaped molten neck remnant adheres to the blow pipe. This remnant then creates the ring-shaped pontil scar when the blow pipe pontil is broken off the bottle base. The third, the sand-tipped pontil scar, resulted from the use of a glass-tipped pontil rod covered with sand; this produced a rough scar, often with sand adhering to the base (Jones 1971).

Within the first two decades of the nineteenth century, hinged molds that shaped the shoulders and the necks of the vessels as well as the body came into widespread use in the United States and England. The three-piece hinged mold had a dip mold body and a two piece, hinged section, which served to form the shoulders and the neck. Bottles molded in a three-piece hinged mold have a seam horizontally around the shoulder and a vertical seam up the neck from the shoulder seam. There is no base seam.

A second type of hinged mold was the two-piece hinged bottom mold. Occasionally utilized in the United States after 1810, these two-piece molds were hinged at the base. Therefore, the resultant bottles had a single vertical seam that ran down the neck and body of the vessel, across the base, and up the other side. However, if a pontil rod was utilized during the finishing of the bottle, the base seam may be obliterated by the pontil scar (Baughner-Perlin 1982:263). By the mid-1840s, two-piece molds began to replace three-piece molds (Lorraine 1968:40). During the 1850s, the two-piece mold was improved and made more stable by the use of cup bottoms and post bottoms (Haskell 1981:62). In the former, a rounded seam encircles the base of the vessel, rather

than crossing the bottom. In the latter, the side seams run over the base of the vessel to meet with a basal circular seam. Many of the bottles and bottle fragments from Angelina were manufactured by two piece molds.

In the late eighteenth and nineteenth centuries, bottle lips were cut off with shears while the glass was still soft. This process was known as a sheared lip, and it is characterized by an abraded, plain cylindrical top. Midway through the nineteenth century, two other lip finishing techniques came into general use. The first was the technique of applying a ring of glass at or below the neck opening. This technique, called "laid on ring," is distinguished by irregularities of the lip itself. The second technique, called an applied lip or tooled lip, employs the use of what was known as a lipping tool. This consisted of a central piece which was placed within the bottle neck and an external arm which, when rotated, formed an even lip of soft glass applied to the neck of the vessel. It should be mentioned that during this process of applying the lip and finishing the vessel, the neck seam had a tendency to be obliterated as a result of reheating the neck. Consequently, the seam only went partially up the neck.

New techniques for holding bottles during finishing also were developed in the mid-nineteenth century. The improved pontil, or the bare iron pontil, came into general use around 1840. The scar from this type of pontil is smooth, and exhibits both an iron oxide residue and a distorted pickup (White 1978:65). During the 1850s, the snap case was introduced. This device had four curved and padded arms, which were clamped around the bottle so that it could be held during finishing. Bottles held in a snap case have no pontil scar on the base. Use of a snap case almost entirely replaced use of the pontil rod by the 1870s (Haskell 1981:30).

After the War Between the States, there was a tremendous increase in the number and kinds of pharmaceutical bottles produced in the United States. New shapes appeared in the early 1860s, such as the paneled flask and the French square. Embossed lettering on bottles became popular at this time and remained popular until the 1920s. A slug plate inserted into a standardized mold enabled inexpensive personalization of bottles. The pharmaceutical bottles that were not embossed had recessed panels for the application of labels. A large collection of pharmaceutical bottles were recovered at 16 SJ 45.

Turn molds were introduced about 1870. The interiors of these molds were covered with paste, which allowed the bottle to be turned in the mold. This process resulted in the removal of vertical seams, but left horizontal striations on the bottle body.

During the 1880s, manganese oxide began to be utilized to

eliminate the natural color of glass. Because of the presence of manganese, such glass tends to become amethyst colored when exposed to the sun. The use of manganese oxide to clarify glass continued until the outbreak of World War I. Between 1916 and 1930, selenium also was utilized as a decoloring agent. Selenium tints the glass a light amber with exposure to the sun (Munsey 1970:55). Both amethyst and light amber glass were found at Angelina.

At the end of the nineteenth century, the semi-automatic bottle machine was developed, and used to produce wide mouth jars. Jars manufactured by this process have seams running up to, but not over, the lip (Lorraine 1968:43). A fully automatic bottle machine was developed and patented by Michael Owens in 1903. All hand labor was eliminated with this process; the glass was drawn into the mold by suction. Bottles manufactured by this process have a ring seam around the base, and the side seam is continuous up to and including the lip. By 1920, the change to automated production of bottles was complete.

Prior to the late 1820s, glass tableware only was decorated by cutting. In 1827, the glass pressing machine was patented in America. The device consisted of a plunger, which pressed the molten glass into a mold. Because vessels produced by this method had to be wide mouthed, it was used to produce tablewares. From the time of its introduction until the 1840s, stippled, so-called "lacey," patterned pressed glass was popular. This technique gradually was replaced by pressed glass patterns which imitated cut glass (Goodwin, Yakubik, and Gendel 1984; McKearin and McKearin 1941).

A large collection of glass was recovered during the Angelina survey. Most of the glass was found at 16 SJ 42, but several whole bottles were collected from 16 SJ 45. Glass artifacts from Angelina are listed by site in Table 13

#### Metal Artifacts

A small collection of metal artifacts were recovered during the Angelina survey. The majority of these artifacts were found at 16 SJ 42 (Table 14). Most of the collection consisted of miscellaneous hardware. Square cut nails were found at 16 SJ 42, 16 SJ 45, and 16 SJ 47. Square cut nails were first produced in 1850, and continued in production throughout the nineteenth century. Wire nails, which first were produced in 1850, did not come into widespread use until the turn of the century (Noel Hume 1970:253-254). Other recovered hardware included spikes, railroad spikes, nuts, bolts, a hook and a washer. Architectural items consisted of a door lock and coverplate. Tack items

Table 13. Glass Artifacts Recovered from Angelina.

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Amethyst glass		38			2				40
Amethyst pressed glass		1			1				2
Amethyst paneled flask neck, tooled lip, two piece mold		1							1
Amethyst pharmaceutical bottle neck, automatic bottle machine		1							1
Amethyst goblet		1							1
Amethyst milk bottle neck, automatic bottle machine		1							1
Amethyst preserve jar, two piece mold					1				1
Amethyst bottle base, two piece mole, post bottom								2	2
Blue glass		17							21
Blue pressed glass		1				2	2		1
Blue milk of magnesia bottle, automatic bottle machine					1				1
Brown glass		30	2			1		1	34
Brown bottle base		2							2
Brown bottle base, automatic bottle machine		1							1
Brown round prescription					2				2
Brown bottle base, modern	1	4							5
Brown bottle base, two piece mold		1							1

Table 13, continued.

Brown bottle base, two piece mold, cup bottom	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Brown bottle base, two piece mold, post bottom	1	3							1
Brown bottle lip, tooled lip bottle, automatic bottle machine	1	1							3
									1
Clear glass	34			1			1		36
Clear pressed glass	3						1		4
Clear pressed goblet base	1								1
Clear etched goblet glass						1			1
Clear tumbler			1						1
Clear soda bottle neck, crown cap	1								1
Clear pharmaceutical bottle base	2								2
Clear pharmaceutical bottle base, two piece mold	2								2
Clear threaded jar neck	1								1
Clear pharmaceutical bottle,					1		2		3
Clear bottle base, automatic bottle machine	1								1
Clear bottle neck, automatic bottle machine	2				3				5
Clear bottle base, modern	1								1
Clear wine bottle base	1								1
Clear Philadelphia oval pharmaceutical bottle, automatic bottle machine					4				4

Table 13, continued.

Clear oval pharmaceutical bottle, automatic bottle machine	16 SJ 41	16 SJ 42	16 SJ. 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
					3				3
Clear ball neck paneled flask, automatic bottle machine					2				2
Clear 2 oz. bottle, automatic bottle machine					1				1
Clear pill bottle, automatic bottle machine					1				1
two piece mold tooled lip									
Dark green glass		18	4			1	3		26
Dark green bottle base up, no seams		4							4
Dark green bottle base, kick			1						1
Dark green bottle neck, tooled lip		1							1
Dark green hand blown glass					1				1
Dark green hand blown jub, tooled lip					1				1
Green glass		1							1
Green pane glass			1						1
Green soda bottle, auto bottle machine					1				1
Green soda bottle neck, modern		1							1
Green bottle base, two piece mold, post bottom		1							1

Table 13, continued.

Green pharmaceutical bottle, two piece mold tooled lip	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Green wine bottle, two piece mold					1				1
					1				1
Light amber glass		2							2
Light green soda bottle glass		2							2
Light green glass		22		1				1	24
Light green pane glass		17							17
Light green bottle base		1							1
Light green bottle base, base seam				1					1
Light green bottle base, two piece mold cup bottom		1							1
Light green pharmaceutical bottle neck, tooled lip		1							1
Light green pharmaceutical bottle		2							2
Light green paneled flask glass		1							1
Light green soda bottle base, two piece mold, post bottom		1							1
Light green soda bottle neck, tooled lip crown cap		1							1
Light green wire reinforced glass		1							1
Light green mason jar glass									1
Light green base, kick up, no seam					1				1



Table 13, continued.

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	16 SJ 46	16 SJ 47	16 SJ 48	Total
Milk glass glass		4							4
Milk glass pressed glass		1							1
Milk glass ointment box		1							1
Milk glass ointment jar, auto bottle machine					2				2
Milk glass lid seal		1				1			1
Milk glass decorative lid									1
Opaque black glass		3						1	4
Opaque black wine base, kick up, no seam					1				1
TOTAL	1	241	9	3	32	6	6	8	306

Table 14. Metal Artifacts Recovered from Angelina.

	16 SJ 41	16 SJ 42	16 SJ 44	16 SJ 45	16 SJ 47	Total
Square rail		4		1	1	6
Wire nail		2		1		3
Miscellaneous nail	1	4		1		6
Spike		1				1
Railroad spike		5				5
Nut		1				1
Bolt		2				2
Bolt, large		5				5
Washer		1				1
Screw in hook		1				1
Lock with two doorknobs		1				1
Small brass hinge		1				1
Padlock				1		1
Harness buckle		1				1
Harness ring		1				1
Coverplate		1				1
Scoop				1		1
Can fragments				3		3
Strap iron			1			1
Miscellaneous metal		20				20
TOTAL	1	51	1	8	1	62

included a harness buckle and a harness ring. Miscellaneous metal artifacts included a padlock, a scoop, and can fragments.

#### Miscellaneous Artifacts

The majority of miscellaneous artifacts consisted of architectural materials. These included bricks, asbestos shingles and tiles, slate, ceramic drainpipe fragments and a painted wood fragment. Industrial materials also were recovered, including slag, concrete fragments, glass insulators, and coal. One modern .410 gauge shotgun shell was found, as well as one bone fragment. Miscellaneous artifacts are listed by provenience in Table 15.

Table 15. Miscellaneous Artifacts Recovered from Angelina.

	16 SJ 41	16 SJ 42	16 SJ 43	16 SJ 44	16 SJ 45	Total
Shotgun shell (410 gauge)					1	1
Glass insulator		3				3
Ceramic drain pipe		11				11
Asbestos shingle		5				5
Asbestos tile		2				2
Wood fragment, grey paint			1			1
Brick/Brick fragment	1	19		1		21
Concrete fragment	1	7				8
Bone		1				1
Slag		5				5
Coal				1	1	2
Slate		1				1
TOTAL	2	54	1	2	2	61

## CHAPTER VIII

### INTERPRETATIONS

In this section, the results of field investigations, archival research, and laboratory analyses are collated to provide an evaluative summary for each cultural resource identified during the survey. Chronological and functional data obtained from the artifact analyses are presented, and an attempt is made to identify each resource on the basis of the historic map evidence. Finally, an assessment of site significance is provided, taking into consideration the results of the field investigations.

Angelina Site 1 (16 SJ 41) yielded a small collection of habitation refuse consisting of ceramics, glass, and architectural material. Although all surface remains were collected, the collection was too small to apply quantitative dating methods. However, the assemblage appears to date from the nineteenth century. Map data indicates that the 1929 St. Elmo-Angelina levee was placed landward of one cabin and one residence in the area of 16 SJ 41, and that the levee covered three other cabins, a residence, and a store (Figure 8). The 16 SJ 41 artifactual assemblage probably derives from one of these structures. As noted previously, all archeological remains from the site were recovered from the surface, and no in situ deposits were observed. Because the site lacks contextual integrity, and due to the paucity of remains recovered, it is unlikely that 16 SJ 41 will yield information important in prehistory or history (36 CFR 60.4d), and therefore it does not warrant consideration for National Register eligibility.

Site 16 SJ 42 yielded a large collection of habitation and industrial refuse. Over 75 per cent of the material consisted of ceramic and glass artifacts. A Mean Ceramic Date of 1884.3 (n=123) was determined, but the numerous sherds of amethyst glass, clear glass, and bottles produced by an automatic bottle machine suggest that the occupation extended into the twentieth century. Architectural materials and hardware comprised 15.1 per cent of the collection. The remaining 9.7 per cent of the collection consisted of industrial materials and debris. The collection undoubtedly derives from the residential area adjacent to and immediately upriver from the Lutch Moore Sawmill (16 SJ 13) (Figures 6 and 8). These structures probably served as housing for company employees; the 1936 Lutch Front Levee was placed landward of several residences in this area. Subsurface testing at 16 SJ 42 failed to identify in situ deposits related to the surface manifestations, and the site appears to have been destroyed by cutbank erosion and deflation of the batture near the bankline. Furthermore, since recovered glass and ceramic materials exhibited considerable water-wear, it is possible that the artifactual assemblage represents the mixed remains of formerly discrete components in the immediate vicinity of the site. It is not possible to confirm that the entirety of the

archeological remains derive from the Lutchter Moore Sawmill site (16 SJ 13). For these reasons, the site did not yield, nor is it likely to yield, information important in prehistory or history (36 CFR 60.4d), and is not considered to be eligible for the National Register.

Site 16 SJ 43 yielded a small collection of ceramics, glass and architectural material. The ceramics yielded a Mean Ceramic Date of 1825 (n=6), but the date may not be reliable due to the small sample size. Historically, this property was part of the David Plantation, and the material may derive from a cabin or residence on this estate. Because of the impoverished artifactual assemblage, and because fieldwork revealed that the site no longer possesses contextual integrity, it is unlikely to yield information important in prehistory or history (36 CFR 60.4d), and does not meet the criteria for inclusion on or nomination to the National Register.

Site 16 SJ 44 yielded a small collection of habitation refuse, including ceramics, glass, and architectural debris. A Mean Ceramic Date of 1861.3 (n=6) was calculated, but this cannot be considered reliable due to the small sample size. The 1929 St. Elmo-Angelina Levee was placed landward of several structures and covered others in this area (Figure 8), which was part of the town of Gramercy. This material, then, appears to derive from a town residence. However, because of the extremely small size of the collection, and the lack of associated features, research potential at this site is considered negligible. In addition, bankline inspection and subsurface testing failed to reveal the presence of intact cultural deposits and the site appears to have been destroyed. Site 16 SJ 44 has not yielded, nor is likely to yield, information important in prehistory or history (36 CFR 60.4d), and is not considered to be eligible for the National Register.

A collection of ceramics, glass, architectural materials, and miscellaneous hardware was recovered from 16 SJ 45. As was the case with all of the sites found during the survey, the vast majority of the collection (89.1 per cent) consisted of ceramics and glass. The ceramics yielded a Mean Ceramic Date of 1878 (n=20), but the large number of sherds of amethyst glass, clear glass, and bottles produced by an automatic bottle machine suggest that occupation extended well into the twentieth century. The collection is particularly notable for the large number of whole bottles, primarily pharmaceutical bottles, that were recovered. Historically, this area was part of Golden Grove Plantation. The artifacts probably derive from a late nineteenth/early twentieth century tenant's residence on this estate. Map evidence indicates that the 1929 St. Elmo-Angelina levee was placed landward of several structures in this area (Figure 8). Fieldwork at 16 SJ 45 failed to recover evidence of undisturbed archeological deposits. Here artifacts were present at the surface and also found incorporated within recent spoil along with a considerable quantity of modern refuse. Discrete heaps of sorted glass and

ceramic artifacts distributed across the site suggest that it has been subject to pot-hunting. For the above reasons, it is unlikely that 16 SJ 45 will yield information important in prehistory and history (16 CFR 60.4d), and the site does not warrant consideration for nomination to the National Register.

Sites 16 SJ 46, 16 SJ 47, and 16 SJ 48 all yielded small collections of habitation refuse. Except for one nail recovered at 16 SJ 47, these collections consisted entirely of ceramics and glass. Sites 16 SJ 47 and 16 SJ 48 had Mean Ceramic dates of 1845.7 (n=10) and 1870.5 (n=6), respectively. These dates should not be considered reliable because of the small sample size. Map evidence indicates that the 1929 St. Elmo-Angelina Levee was placed landward of several structures in this general area, which was part of the Longview settlement (Figure 8). Thus, sites 16 SJ 46, 16 SJ 47, and 16 SJ 48 probably represent the refuse from separate households in the settlement. However, the lack of a substantive archeological assemblage obviates research potential. In addition, no intact cultural deposits were observed or recorded at any of these localities, and the sites appear to have been completely destroyed by fluvial processes. Like all other sites recorded within the Angelina project area, these sites do not fulfill eligibility requirements (36 CFR 60.4) for nomination to the National Register.

Since none of the sites recorded during this survey possess contextual integrity, and due to the lack of viable assemblages, further research at these sites will not produce additional data relevant to previously identified themes significant to the history of the project area.

## CHAPTER IX

### CONCLUSIONS AND RECOMMENDATIONS

This report has presented the results of archival research and a cultural resources survey of the Angelina Revetment project area in St. James Parish, Louisiana. Archival and map research documented historic occupation and land use within and in proximity to the project area, and this research also identified natural and anthropogenic processes affecting the Mississippi River batture at this locality during the historic period. Fieldwork at Angelina consisted of an intensive pedestrian survey and systematic subsurface shovel testing program. Subsequent site recordation techniques included a combination of surface collection, shovel and auger testing and, where appropriate, the excavation of profiles along the cutbank. Laboratory analyses focused on the classification of artifacts to obtain chronological and functional data. Combined findings of archival research, archeological survey and site testing, and artifact analysis were used to evaluate the nature and significance of sites recorded during this project.

The majority of archeological remains recorded during this survey effort were recovered at or near the bankline, in conditions of good surface visibility. Extensive sections of the project area contained dense secondary vegetation, particularly in low-lying borrow areas. Although surface visibility in these locales was poor, there is little likelihood that cultural resources survived extensive borrowing. Systematic shovel testing was implemented to overcome this difficulty; however, this technique provided negative research results. The accumulation of recent overburden along the batture suggests that subsurface shovel and hand auger tests away from the bankline are probably too shallow to detect the presence of deeply buried cultural resources. It is noteworthy that, except for recent fill, no subsurface cultural deposits were identified through shovel testing. Problems of visibility and recent overbank deposits suggest that ideal, or one hundred per cent coverage of the project area probably was not achieved. Nevertheless, good visibility prevailed in areas where older deposits currently are being exposed along the shoreline of the Mississippi.

A total of eight sites were recorded during the field survey of the Angelina Revetment Item. Artifactual remains associated with these sites all date from the mid to late nineteenth and early twentieth centuries. However, sample sizes of ceramic artifacts generally were not sufficient to obtain reliable Mean Ceramic Dates. The remains were overwhelmingly surface finds; no in situ cultural deposits were observed or recorded. Erosion and



redeposition represent the dominant site destruction processes. They are reflected in the location of the sites relative to the present river channel, the wave-washed and eroded condition of the artifacts, and where present, stratigraphic position.

The nature and range of materials observed and collected during the survey are not unique for historic period occupations along the Mississippi River in southeastern Louisiana. Generally comparable, larger, and more representative assemblages have been identified during the course of previous cultural resources investigations of the Mississippi River batture (Goodwin, Yakubik, and Gendel 1983; Goodwin, Gendel, and Yakubik 1983; Goodwin et al. 1985). Because of the generally low frequency of observed and collected materials, the artifactual assemblages do not comprise statistically reliable populations for further chronological or functional analysis. Therefore, none of the eight sites recovered during the survey effort are likely to yield information important in history (36 CFR 60.6).

In addition, all of the sites lack contextual integrity and they do not present sufficient archeological context for further research or comparative analysis. Thus, none of the sites possess integrity (36 CFR 60.6), as defined by the criteria for the National Register of Historic Places. As a result, none of the eight sites fulfill the criteria for nomination to and inclusion on the National Register of Historic Places. No further work is recommended.

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